REPORT
OF
THE SECONDARY EDUCATION COMMISSION

(October 1952—June 1953)

MINISTRY OF EDUCATION AND SCIENTIFIC RESEARCH
GOVERNMENT OF INDIA
1958

First Edition	...	...	*September, 1953*
First Reprint	...	...	*September, 1954*
Second Reprint	...	...	*October, 1955*
Third Reprint	...	...	*February, 1956*
Fourth Reprint	...	...	*January, 1958*

Publication No. 165

Printed in India by the Hind Union Press, New Delhi and published by the Manager of Publications, Delhi-8.

CONTENTS

CHAPTER		PAGE
I.	INTRODUCTORY	1
	(1) Appointment of the Commission ; Terms of Reference ; Inauguration of the Commission ; Procedure of Work.	
	(2) Raison d'etre of the Commission : All-India Problems ; Previous Education Commissions ; Implementation of Recommendations ; Basis of Recommendations.	
II.	APPRAISAL OF THE EXISTING SITUATION	9
	(1) Historical Survey : Origin of the Present System ; The Despatch of 1854 ; Hunter Commission of 1882 ; The University Commission of 1902 ; Boards of Secondary Education ; The Calcutta University Commission of 1917 ; The Hartog Committee ; The Sapru Committee ; The Abbot-Wood Report ; The Sargent Report ; The Central Advisory Board's Recommendation ; University Education Commission of 1948.	
	(2) Existing Pattern of Education in India : Pre-Primary Stage ; Primary and Post-Primary Stage ; Higher Elementary Schools ; Secondary Schools ; Higher Secondary Schools ; Higher Education ; Intermediate Colleges ; Professional Colleges ; Technical Institutes ; Polytechnics.	
III.	REORIENTATION OF AIMS AND OBJECTIVES	20
	(1) Defects of the Existing System.	
	(2) Aims of Secondary Education : Educational Needs of Democratic India ; Role of Education in Developing Democratic Citizenship ; Need for vocational bias and increasing Productive effciency ; Development of Personality ; Education for Leadership.	

CHAPTER PAGE

IV. NEW ORGANISATIONAL PATTERN OF SECONDARY EDUCATION 30

(1) Duration of the Secondary Education ; Transitional Stage of Development ; Future of Intermediate Colleges ; A Three-year Degree Course ; High Schools and Higher Secondary Schools ; Degree Colleges ; Professional Colleges ; Technical and Vocational Education ; Need for Diversified Courses ; Multilateral or Multipurpose Schools ; Agriculture in Secondary Schools.

(2) Technical Education :

Its Importance ; Its Essential Characteristics ; Relation of Technical Education and Industry ; Hunter Commission on Technical Education ; Causes for Slow Progress of Technical Education ; Types of Technical Education ; Training of Craftsmen for Industry ; Apprenticeship Training ; Councils and Boards of Technical Education.

(3) Other Types of Schools :

Public Schools ; Residential Schools ; Residential Day Schools ; Schools for the Handicapped ; Continuation Classes.

(4) Some Special Problems of Women's Education :

Co-education ; Conditions for Mixed Schools.

V. STUDY OF LANGUAGES 59

Languages Studied in the Secondary Stage ; Languages and the Constitution ; Study of Hindi in the States ; Position of English in the Schools ; The Position of Linguistic Minorities ; The Purpose of Languages Study : The Places of Hindi and English and the Classical Languages ; Study of the Languages in the Foreign Countries ; Conference of Professors of Hindi and English ; Need for Qualified Teachers and Improved Methods ; Conclusion.

VI. CURRICULUM IN SECONDARY SCHOOLS ... 74

(1) Criticisms of the Existing Curriculum ; Basic Principles of Curriculum Construction ; Cur-

CHAPTER PAGE

riculum for the Middle Schools Stage ; Objectives of Some Subjects Defined ; Curriculum for the High and Higher Secondary Stage ; Objectives of some Subjects Defined.

(2) Textbooks for Secondary Schools :

Some Defects of the Existing System ; Standards in the Production of the Textbooks ; Role of Publishers of Textbooks ; Constitution of the High Power Committee ; Books of Reference in Regional languages.

VII. DYNAMIC METHODS OF TEACHING ... 102

(1) Need for Right Methods ; Objectives of Right Methods Defined ; The Value of Activity Methods ; Adaptation of Methods to Suit Different Levels of Intelligence ; Balancing Individual and Group Work.

(2) The Place of the Library in the School ; Class Libraries and Subject Libraries ; Vacation Library ; Use of the School Library for Community Purposes ; the Need for Suitable Literature and the Role of the State in Preparing such Literature.

(3) Museums and their Value in Education.

VIII. THE EDUCATION OF CHARACTER ... 119

(1) The Basic Principles ; Need for Cooperation Between the School Community and the Larger Community Outside ; Education of Character and School Activities ; Studies and Character Formation.

(2) Discipline :

Influence of Political Movements ; Factors Promoting Discipline ; Role of Teachers.

(3) Religious and Moral Instruction :

Place of Religious Instruction in Secular State ; Voluntary Basis of Religious Instruction.

(4) Extra-curricular Activities :

Some Types Described : Their Place in Education.

CHAPTER PAGE

IX. GUIDANCE AND COUNSELLING IN SECONDARY SCHOOLS 131

Importance of Guidance to Pupils ; Qualification of a Guidance Officer ; Role of Teachers in Guidance ; Principles to be Observed ; Place of Visual Aids ; Role of Government Agencies ; Career Conference ; Bureau of Vocational and Educational Guidance.

X. THE PHYSICAL WELFARE OF STUDENTS 136

Importance of Physical and Health Education ; Measures to be Adopted for Health Education ; Medical Examination ; School Health Service and the Community ; The Role of the Teachers ; The Concept of Physical Education ; Training of Physical Education Teachers.

XI. A NEW APPROACH TO EXAMINATION AND EVALUATION 144

Examinations ; Internal and External ; Scope and Limitations of the Present System ; Effect of the System on Education ; The Place of Examinations ; Suggestions for the Improvement of the Present System ; Need for School Records ; Maintenance of Records ; Need for Research ; Evaluation and Marking ; School Leaving Certificate ; Assessment for the Public Examination and the Examination Certificate.

XII. IMPROVEMENT OF THE TEACHING PERSONNEL 155

(1) Teachers :

Need for Improving the General Conditions ; Methods of Recruitment ; Period of Probation ; Qualifications of Teachers for High School Stage ; Conditions of Service ; Triple Benefit Scheme for Teachers ; Security of Tenure ; Arbitration Board ; Age of Retirement ; Other Amenities ; The Problem of Additional Employment ; Teachers' Status in Society ; The position of the Headmaster.

CHAPTER PAGE

(2) Training of Teachers :

Importance of the Training of Teachers; Types of Teachers Training Institutions ; Need for Better Equipped Teaching personnel ; Graduate Teacher Training ; Secondary Grade Teacher Training ; Practical Training of Teachers ; Training in Co-curricular Activities ; Liaison between Training Institutions and Other Agencies ; Training Colleges and Research ; Importance of Admission to Training Colleges ; Residential Facilities ; Post-Graduate Courses in Education ; Staffing of Training Institutions.

XIII. PROBLEMS OF ADMINISTRATION 177

(1) Organization and Administration :

Need for Coordination of Educational Effort at Different Levels ; Director of Education ; State Boards of Secondary Education ; Its Composition & Functions ; Board of Teacher Training Institutions ; Its Composition and Functions ; Central and Provincial Advisory Boards of Education.

(2) Supervision and Inspection of Schools :

Selection of Inspectorate ; Their Duties.

(3) Management and Conditions of Recognition ; Types of Managements ; Control over Opening New Schools ; Conditions of Recognition.

(4) School Building and Equipment :

Open-Air School ; Playgrounds ; Legislation for Acquiring Open Spaces ; Type and Design of Schools ; Size of a Class Room ; Construction Design for a School ; Need for Research in School Building ; Equipment ; Audio-visual Aids ; Hostels ; Quarters for Staff.

(5) Hours of Work and Vacations ; Holidays.

(6) Recruitment to Public Services :

Effect of the present Method of Recruitment on Education ; Method of Recruitment in India and Other Countries ; Suggestions for Improving the Method of Selection.

CHAPTER PAGE

XIV. FINANCE 208

Financial Aid to Secondary Education ; Responsibilities of Centre and States ; Sources of Revenue ; Financing of Vocational Education in the U.S.A ; Federal Board of Vocational Education ; Other Possible Sources of Revenue ; Other Measures to Relieve the Cost of Secondary Eucation ; Central Aid to Secondary Education.

XV. THE SECONDARY SCHOOL AS WE VISUALIZE IT. ... 216

Provision of a Proper Environment ; Promotion of Extra-curricular Activities ; Provision of Craft and Productive Work ; Building up the School Library Service ; School as a Centre of Community ; Reorientation of Teachers ; Freedom of Schools.

CONCLUSION 225

SUMMARY OF RECOMMENDATIONS ... 230

APPENDICES :

1. Government of India Resolution Appointing the Secondary Education Commission ... 245
2. Copy of Questionnaire 246
3. Tour Programme of the Commission 254
4. List of Bodies and Individuals Who Gave Oral Evidence or Submitted Memoranda or Otherwise Assisted the Commission ... 256
5. Statistics Regarding Number of Primary and Secondary Schools (Middle, High and Higher) ; Enrolment and Expenditure ... 284
6. Note on Agricultural Education in the U.S A. 288
7. Specimen form of Cumulative Record ... 289
8. Specimen Copy of the Secondary School Leaving Certificate Used by Madras Government ... 296
9. Scheme Regarding Pension-Cum-Provident Fund-cum Insurance 301
10. Smith Hughes Act of the U.S.A. 304

Administrative Set-up of the State Department of Education. 310

Educational Ladder—Proposed Organisational Pattern 311

REPORT OF THE SECONDARY EDUCATION COMMISSION

CHAPTER I
INTRODUCTORY

I

PREAMBLE, TERMS OF REFERENCE AND WORK OF THE COMMISSION

Appointment of the Commission

The Secondary Education Commission appointed by the Government of India in terms of their Resolution No. F. 9-5/52-B-I, dated 23rd September, 1952 (Appendix I), having completed its labours, presents the following Report based on its deliberations.

The Government of India, in their *communique* quoted above, referred to the recommendation of the Central Advisory Board of Education made at its 14th meeting held in January 1948 that a Commission be appointed to examine the prevailing system of Secondary Education in the country and suggest measures for its re-organisation and improvement. The Board reiterated its recommendation in January 1951. The Government of India had also other considerations in mind when appointing this Commission, such as the desirability of changing over from the prevailing system of secondary education which is unilateral and predominantly academic in nature to one which will cater at the secondary stage for different aptitudes and interests. The Commission appointed by the Government of India consisted of the following :

1. DR. A. LAKSHMANSWAMI MUDALIAR,
   Vice-Chancellor, Madras University (Chairman)

2. PRINCIPAL JOHN CHRISTIE,
   Jesus College, Oxford.

3. DR. KENNETH RAST WILLIAMS,
   Associate Director, Southern Regional Education Board Atlanta (U.S.A.).

4. MRS. HANSA MEHTA,
   Vice-Chancellor, Baroda University.

5. SHRI J.A. TARAPOREVALA,
Director of Technical Education,
Government of Bombay.

6. DR. K.L. SHRIMALI,
Principal, Vidya Bhavan Teachers' Training College,
Udaipur.

7. SHRI M.T. VYAS,
Principal, New Era School,
Bombay.

8. SHRI K.G. SAIYIDAIN,
Joint Secretary to the Government of India,
Ministry of Education (Ex-officio Member).

9. PRINCIPAL A.N. BASU,
Central Institute of Education,
Delhi (Member-Secretary.)

Dr. S.M.S. Chari, Education Officer, Ministry of Education, acted as Assistant Secretary to the Commission.

Terms of Reference

Under the terms of reference, the Commission was asked :

"(*a*) to enquire into and report on the present position of Secondary Education in India in all its aspects ; and

(*b*) suggest measures for its reorganisation and improvement with particular reference to

(*i*) the aims, organisation and content of Secondary Education ;

(*ii*) its relationship to Primary, Basic and Higher Education ;

(*iii*) the inter-relation of Secondary Schools of different types ; and

(*iv*) other allied problems

so that a sound and reasonably uniform system of Secondary Education suited to our needs and resources may be provided for the whole country."

Inauguration of the Commission

The Commission was inaugurated by the Hon'ble Minister of Education, Maulana Abul Kalam Azad, on the 6th October, 1952 in New Delhi. It immediately proceeded to consider its programme of work. Prior to the first meeting of the Commission, the Chairman and the Member-Secretary discussed the issue of a suitable questionnaire. They

had the advice of some headmasters and others interested in education and, keeping in view the main functions which the Commission had to discharge, sent out a detailed questionnaire, a copy of which is given in Appendix II. The questionnaire was sent to a large number of educationists, administrators and leaders of public opinion interested in the sphere of education. Replies were received from many of them. The Commission acknowledges its thanks to all those who have sent their replies to the questionnaire.

Itinerary

Soon after its inauguration, the Commission met in New Delhi and considered the scope of its functions with reference to the terms under which it was appointed, the manner in which it was to discharge its responsibilities and the extent to which it would be necessary for the Commission to elicit public opinion from educationists and other citizens all over the country. It drew up a detailed tour programme to enable the members to visit various States. A copy of the tour programme is appended (*vide* Appendix III). The Commission regrets that within the limited time at its disposal it could not accept invitations to visit other places but it feels that the ground covered has given it a reasonable opportunity to understand and appreciate the many problems of Secondary Education in the various States of the Indian Union.

Co-opted Members

In most of the States which the Commission visited, the Government of the State concerned nominated a member of the Education Department or a prominent educationist of the State as a co-opted member during the Commission's tours in the particular State. The following persons were co-opted as members of the Commission for the States mentioned :

Shri C. L. Kapoor, *Secretary, Education Department*, Punjab

,, A. A. Kazmi, *Director of Education*, Jammu and Kashmir,

,, S. N. Sahay, *Vice-Chancellor, Bihar University*, Patna.

and

,, J. C. Mathur, *Secretary, Education Department*, Bihar,.

,, S. C. Rajkhowa, *Inspector of Schools*, Assam.

,, A. K. Chanda, *Chairman, Secondary Education Board*, West Bengal.

Dr. B. Prasad, *Director of Public Instruction*, Orissa.

Shri S. Govindarajulu Naidu,
Director of Public Instruction, Madras.

,, V. Sundaraja Naidu,
Director of Public Instruction, Travancore-Cochin.

,, J. B. Mallaradhya,
Director of Public Instruction, Mysore

,, Dr. D. Shendarkar
Deputy Director of Public Instruction, Hyderabad

,, V. S. Jha, *Secretary*,
Education Department, Madhya Pradesh.

Shri D. C. Pavate,
Director of Education, Bombay.

,, Nanabhai Bhatt, M. P., *Gram Dakshina Murti*,
Saurashtra.

,, S. N. Chaturvedi, *Director of Education*,
Madhya Bharat.

,, R. G. Gupta, *Assistant Director of Education*,
Rajasthan.

Dr. A. N. Banerjee, *Director of Education*,
Delhi.

The Commission wishes to express its sincere thanks to the co-opted members who gave valuable advice and materially helped the Commission by arranging for visits to educational institutions and for interviews. The Commission had largely to leave it to the Directors of Public Instruction and to the co-opted members in these States to decide on the representatives who were to be interviewed. Besides the co-opted members, certain of the State Governments appointed also Liaison Officers whose duty it was to help in arranging for the meetings of the Commission, for the interviews, and for visits to educational institutions and generally to make the work of the Commission profitable and pleasant. The Commission wishes to express its thanks to these officers for the very efficient help that they gave, enabling it to discharge its duties satisfactorily. The Commission had the advantage of interviewing a large number of distinguished educationists, members of Universities, representatives of teachers' organisations, representatives of managements, high officials of the Department of Education and associated Professions, Ministers of the States and Centre and leading representatives of the public. A list of such persons is given in Appendix IV. To all these persons the Commission is greatly indebted for the opportunity of a free and frank exchange of ideas on all important subjects connected with Secondary Education.

The Commission was gratified to note that in all the States that were visited great interest and enthusiasm was evinced in problems of

secondary education. In several States, Committees had already been appointed to enquire into and report on the working of Secondary Education in these States. The Commission wishes to add that it is particularly grateful to the State Governments, to the Ministers of Education and other Ministers of the States, to the Directors of Public Instruction and to the Ministry of Education at the Centre for their ready willingness to assist the Commission, and for the manner in which every possible co-operation was extended in the work that it had undertaken.

II

RAISON D'ETRE OF AN ALL-INDIA COMMISSION

In the course of our interviews the question arose as to the necessity for the Central Government to appoint an All-India Commission on Secondary Education since, under the Constitution, education is a responsibility of the State Governments. This is an important issue and we consider it necessary to state clearly the *raison d'etre* of such a Commission. We recognise that Secondary Education is mainly the concern of the States but, in view of its impact on the life of the country as a whole, both in the field of culture and technical efficiency, the Central Government cannot divest itself of the responsibility to improve its standards and to relate it intelligently to the larger problems of national life. The aim of Secondary Education is to train the youth of the country to be good citizens, who will be competent to play their part effectively in the social reconstruction and economic development of their country. The Central Government is therefore naturally concerned about the type of education to be given to the youth of the country. It must make sure that Secondary Education will prepare young men for the various vocations that are open to them. Moreover, it is directly charged with the responsibility of maintaining proper standards in higher education. This cannot be done, unless careful consideration is given to the level of efficiency attained at the secondary stage.

All-India Problems

There are several other fields in which it is desirable that a clear policy should be laid down on an all-India basis. One of the fundamental rights guaranteed by the Constitution is the right of every citizen of the Union to free and compulsory education up to the age of 14. For the proper functioning of democracy, the Centre must see that every individual is equipped with the necessary knowledge, skill, and aptitudes to discharge his duties as a responsible and co-operative citizen. What James Madison said about his country, the United States, many years ago, holds good today in our country also. "A popular Government without popular information or the means of acquiring it is but a prologue to a farce or tragedy or perhaps both. Knowledge will forever govern ignorance, and the people who mean to be their own governors

must arm themselves with the power which knowledge gives". We should, however, like to add that it is not only knowledge that is required, but also the right kind of social training and the inculcation of right ideals without which knowledge by itself may be sterile or worse. Training for democracy postulates a balanced education in which social virtues, intellectual development and practical skill all receive due consideration and the pattern of such an education must be envisaged on an all-India basis.

Another important question with which we were faced everywhere was the place of the different languages more particularly of Hindi and English, in the scheme of secondary education. There is a great deal of confused thinking as well as wide difference of opinion on this subject. If educational progress is to be well planned and confusion is to be avoided, the tendency to adopt divergent and even conflicting policies in this matter has to be resisted. And it is not only in the matter of linguistic policy that this tendency to separatism has been in evidence. There has been an accentuation in recent years of certain undesirable tendencies of provincialism, regionalism, and other sectional differences. This situation is fraught with serious consequences and it is much the duty of statesmen as of educationalists to take steps to reorient people's mind in the right direction. If education fails to play its part effectively in checking these tendencies, if it does not strengthen the forces of national cohesion and solidarity, we are afraid that our freedom, our national unity as well as our future progress will be seriously imperilled. We feel that in the entire planning of education and to some extent, in the matter of its financial responsibility, there should be the closest co-operation and co-ordination between the Centre and the States. In some fields of Secondary Education, the Central Government should assume greater responsibility, e.g., in the training of teachers, the formulation of educational and vocational tests, the production and selection of better text books, and the training of technicians. The Centre has also a special obligation with regard to the physical welfare of the pupils. It has already organised a National Cadet Corps for schools. Consistently, therefore, with the recognition of the role of the States in formulating educational programmes and implementing them, we have no doubt whatever that, in view of the crucial importance of education for the whole future and progress of the country in every sphere, economic, industrial, social and cultural, the Central Government should view education from an over-all national angle and assume the duties of educational guidance and leadership. While there is everything to be said for local and State autonomy in education, it should not be interpreted to justify differences in basic educational policies and objectives.

Previous Education Commissions

A number of Commissions have been appointed in the past to survey Indian Education—the Indian Education Commission of 1882, the

Commission of 1902, the Sadler Commission of 1917 and the recent Radhakrishnan Commission, all of which dealt incidentally with certain aspects of Secondary Education. But no Commission has so far been appointed to survey the problems of Secondary Education as a whole. We have been entrusted with this responsibility and, in discharging it, we found that we had also to give some consideration to primary as well as higher education. This in fact was enjoined on us by our terms of reference since they are both intimately linked up with Secondary Education and their standards and efficiency depend largely on the proper organisation of Secondary Education. Reference has, therefore, been made from time to time to these two stages. In discussing the new pattern of Secondary Education organisation we have indicated how it is to be linked up at one end with Primary Education and at the other with University Education and how the total duration of education in these three stages will be distributed.

We have the feeling that the appointment of the Commission has been made very opportunely because, in our tour, we found clear evidence of serious interest in this problem all over the country. Not only is this interest apparent amongst educational authorities and teachers but State Governments have also taken steps to have the whole problem of Secondary Education surveyed and examined by competent committees appointed for the purpose In some States their reports have already been submitted, while in others the matter is under active consideration. We have studied with interest and profit such reports as have been published and we have had the advantage of an exchange of views with some of the members of these committees. Because of this general awakening, there is reason to hope that the State and the Centre would take active steps to implement as far as possible, the approved recommendations made by this Commission and the various State Committees.

It was also pointed out that this Commission should have preceded the University Commission established in 1948. This is obviously not a matter for us to discuss. Actually it has been a great advantage for us to know exactly what the University Commission had to say. In fact every Commission on education has had necessarily to deal with Secondary Education to a very large extent. It cannot be otherwise. The Indian Education Commission of 1882, the Commission of 1902 with its more restricted terms of reference, the Commission of 1917, more popularly known as the Sadler Commission and the latest University Education Commission of which Dr. Radhakrishnan was the Chairman have all dealt with some aspects of secondary education. Their reports have all been studied by us with interest and profit.

Implementation of Recommendations

Many recommendations of previous Commissions have not been implemented. Many responsible people have therefore questioned the

likelihood of any steps being taken to examine and implement the recommendations of this Commission. In reply we would point out that India's needs today are different from what they were in the past. India is now free and independent. The educational needs of a free country are different and ought to be different from what they were under foreign domination. The implementation of a report in the days of foreign rule was the responsibility of an alien government and if nothing were done that Government was to blame. Today, however, in a self-governing democracy, the responsibility for implementing a sound educational policy rests with the people themselves and their chosen representatives. If public opinion, therefore, proclaims clearly that a new educational policy is needed, the report which we are presenting, if approved, will be preliminary to action, and not, as reports have too often been in the past, an alternative to action. We are not inclined to take a pessimistic view of the matter and, although we are aware of the conditions under which State and Central Government will have to examine this report, we believe that the State and the Centre are most actively interested in the problems of education, more particularly of secondary education.

Basis of Recommendations

We are anxious to see that our recommendations are of such a nature that they can be implemented. For this reason, we have divided them into short-term and long-term recommendations. It is, however, essential that the general orientation of policy should be clear from the outset so that the refashioning of the educational pattern may proceed on right lines and, even where we are not able to put certain suggestions and recommendations into practice immediately, we should know in what direction we are moving. We realise that some of the specific recommendations that we have made may have a comparatively short range applicability, for changed conditions—social, political, economic and cultural—always postulate new educational objectives and techniques. In a changing world, problems of education are also likely to change. The emphasis placed on one aspect of it today may not be necessary at a future date. It must, therefore, be clearly understood that these recommendations are not to be considered as recommendations for all time but they must necessarily be looked upon as recommendations for a fair period. They may have to be reviewed from time to time in the light of experience. In any case, educational reform must be undertaken in such a way that it remains permanent over a definite period of time. Our proposals should not be subject to frequent changes by those temporarily responsible for carrying on the democratic form of Government. While we agree that experiments in education are to be continuous, we feel that the general lines of reform should be such as would be conducive to a steady growth.

CHAPTER II

APPRAISAL OF THE EXISTING SITUATION

I

HISTORICAL SURVEY

Origin of the present system

In order to present clearly the background of the present system of Secondary Education and to show how it has developed its various characteristic features, it seems necessary to pass in quick review the various Government Resolutions as well as the reports and recommendations of the different Committees and Commissions which have studied this problem directly or indirectly. This will also enable us to understand on what lines the problem of the reorganisation of Secondray Education has been envisaged by educationists during the last fifty years.

The origin of the system of education which is prevalent today can be traced to the beginning of the nineteenth century when the Government of the day had surveys made of the then prevalent systems of education with a view to re-organising education to suit the needs of the times. Consequent on Macaulay's minutes regarding the educational policy of the future, Lord William Bentinck's Government issued a *communique* wherein it was stated "that the great object of the British Government ought to be the promotion of European literature and Science among the natives of India ; and that all the funds appropriated for the purpose of education would be best employed on English education alone". The Resolution also stated that provision should be made for the continuance of schools and colleges where indigenous learning was being imparted.

Important changes in the type of education to be imparted to the youth of the country were introduced in the first half of the 19th century. The minutes of Lord Macaulay and subsequent resolutions passed by the Government (in 1835) led to the establishment of schools teaching European literature and science. These schools became immediately popular because of the great interest shown in English education by some of the educated Indians and more particularly by leaders like Raja Ram Mohan Roy and others.

The education imparted in these schools became a passport for entrance into Government services. This was mainly due to the Proclamation issued by Lord Hardinge in 1844 that for service in public offices

preference should be given to those who were educated in English schools. In consequence thereof education was imparted with the limited object of preparing pupils to join the service and not for life. In the new High Schools the standard of achievement in literary subjects was from the very beginning high but little or no progress was made in training the pupils in the practical side of science. We may, therefore, conclude that some of the defects persisting today owe their origin to the policy pursued in the past.

Despatch of 1854

By 1853 a number of problems had arisen which required immediate solution. As a result of an enquiry made, a despatch (*known as 'Wood's despatch'*) was issued in 1854 reviewing the development of education to date, and proposing certain new schemes for adoption. Among these the following may be mentioned : Departments of Public Instruction under an important officer to be called the Director of Public Instruction were to be created ; a scheme to establish Universities was to be formulated, whose functions were to hold examinations and confer degrees. It is interesting to note that the despatch recommended that a number of high schools should be set up. The despatch observed : "our attention should now be directed to a consideration, if possible still more important and one which has been hitherto, we are bound to admit, too much neglected, namely, how useful and practical knowledge suited to every station of life, may be best conveyed to the great mass of the people who are utterly incapable of obtaining any education worthy of the name by their unaided efforts ; and we desire to see the active measures of Government more especially directed for the future to this object, for the attainment of which we are ready to sanction a considerable increase of expenditure".

The establishment of Universities in the year 1857 had far-reaching consequences especially on the content, range and scope of secondary education. The Universities dominated secondary schools in every respect. Secondary education instead of being a self-sufficient course preparing students to enter life after completing the course became merely a step towards the Universities and University colleges with the result that schools could not function with an independent programme of their own.

Certain specific defects grew out of the system of secondary education in vogue during the years 1854-1882 : the mother-tongue was completely neglected as a medium of instruction ; nothing was done to train teachers for the secondary schools ; and the course of study became too academic and unrelated to life mainly because there was no provision for vocational or technical courses. One further defect that had now taken concrete shape was that the Matriculation Examination began to dominate, not only secondary education but even the education imparted in primary schools.

Hunter Commission of 1882

In 1882 an education commission, known as the *Hunter Commission*, was appointed by the Government to report on the whole question of education in the country. The following instructions regarding Secondary Education were given : "The Commission was directed to enquire into the quality and character of the instructions imparted in schools of this class. The great majority of those who prosecute beyond the primary stage will never go beyond the curriculum of the middle, or at farthest of the high schools. It is therefore of the utmost importance that the education they received should be as thorough and sound as possible. There are grounds for doubting whether there is not, in some provinces at any rate, much room for improvement in this respect."

Since it was very costly for the Government to maintain secondary schools, it was thought that the Government should take over the entire responsibility of primary education, leaving secondary education to private enterprise. The Commission recommended that "Secondary Education as far as possible, be provided on the grant-in-aid basis and that the Government should withdraw as early as possible from the direct management of Secondary Schools."

The report of the Hunter Commission of 1882 is a valuable document which not only gave an excellent survey of the position of secondary schools at that time, but made certain fundamental recommendations concerning the type of education to be given at this stage. It anticipated what has come to be recognised later as diversified courses of instructions in the secondary stage of education. With regard to vocational and technical education, the commission recommended that in the particular class of high schools there should be two avenues, one leading to the entrance examination of the University and the other of a more practical character intended to fit the youths for commercial, vocational or non-literary pursuits. In spite of such specific recommendations neither the public nor the Government seem to have appreciated the value of the suggestions, with the result that the recommendations were practically ignored.

During the period 1882-1902 there was a considerable expansion in the field of secondary education. It was due partly to the enthusiasm of private enterprise and partly to the system of grant-in-aid. This unwieldy expansion without proper consolidation led to certain obvious defects.

University Commission 1902

In 1902 a University Commission was appointed, the main purpose of which however, was to review the position of the Universities regarding the higher grades of examination. As a result of the recommenda-

tions of this Commission secondary education came to be even more under the domination of the Universities : under the Indian Universities Act of 1904, schools had to be recognised by the Universities, and rules and regulations were framed for this purpose.

Boards of Secondary Education

The feeling that the Universities were dominating secondary education and that an attempt should be made to see that secondary education was conducted independently of the Universities, led to the creation in certain States of Boards of Secondary Education which were responsible for laying down syllabuses and for conducting examinations at the school final stage. The Secondary School Leaving Certificate was expected to furnish full information as to the progress of the pupil during the whole period of the school course as well as the Public Examination conducted at the end of that course. On the basis of these records it was left to employers and to principals of University colleges to entertain them in service or to admit them to college for such courses of study as in the opinion of the Principals concerned the pupils were best fitted.

Calcutta University Commission of 1917

The next important stage was the appointment of the Calcutta University Commission in 1917 under the Chairmanship of the late Sir Michael Sadler. This Commission went into the question of secondary education and held the view that the improvement of secondary education was essential for the improvement of University education. The Commission made certain important recommendations among which were the following :—

"1.—The dividing line between the University and Secondary courses is more properly to be drawn at the Intermediate examination than at the Matriculation.

2. Government should, therefore, create a new type of institutions called the intermediate colleges which would provide for instruction in Arts, Science, Medicine, Engineering, Teaching etc. These colleges might either be run as independent institutions or might be attached to selected high schools.

3. The admission test for Universities should be the passing of the Intermediate Examination.

4. A Board of Secondary and Intermediate Education consisting of the representatives of Government, University, High schools and Intermediate colleges to be established and entrusted with the administration and control of Secondary Education."

Though the Sadler Commission was appointed to enquire into the conditions of the Calcutta University and to make recommendations, the report was so comprehensive that many of the Universities in India began

to implement the suggestions contained therein. For the first time a Commission had recommended the attachment of Intermediate classes to the high schools and the setting up of a Board of Education to control High Schools and Intermediate Education.

During the subsequent period there was a great expansion of secondary education and the number of secondary schools began to increase both in rural and urban areas largely owing to the interest evinced by the public and the generous donations of the individuals and institutions.

But problems relating to the training of teachers, their salaries, and conditions of service were left unsolved. The unprecedented expansion of the academic types of secondary schools resulted in a failure to provide for technical schools or for bifurcated courses of studies in high schools.

Hartog Committee

In 1929, as auxiliary to the Indian Statutory Commission, a Committee was appointed known as the Hartog Committee, to review the position of education in the country. In the opinion of this Committee, the Matriculation of the University still dominated the whole of the secondary course. In order to obviate this defect, the Committee recommended that a large number of pupils intending to follow certain avocations should stop at the middle school stage. There should be "more diversified curricula in the schools". The Committee also recommended "diversion of more boys to industrial and commercial careers at the end of the middle stage, preparatory to special instruction in technical and industrial schools." It is interesting to note that the Committee reviewed the position of the training of teachers and the service conditions of secondary teachers and remarked "that enough cannot be done in the short space of nine months which is all that is usually available, to uproot the old methods of teaching to which many of the students are accustomed." The best pupils were not attracted to the teaching profession, the Committee held, because the best type of men cannot be attracted to the profession so long as the general conditions remain unsatisfactory and "only too frequently the teachers have no heart in their work," and "in no province is the pay of the teacher sufficient to give him the status which his work demands".

Sapru Committee

The Supru Committee appointed in 1934 by the U. P. Government which enquired into the causes of unemployment in Uttar Pradesh (United Provinces) came to the conclusion that much of the unrest was primarily due to mass unemployment and that the system of education commonly prevalent prepared pupils only for examinations and degrees and not for an avocation in life. "In a situation like this," the Com-

mittee remarked "the real remedy is to provide diversified courses of study at the secondary stage and to make that stage more practical and complete in itself and more closely related to the vocational requirements of different types of students. At the secondary stage, side by side, with the general course leading to the University there should be parallel courses offering instructions in technical, commercial, industrial and other vocational subjects".

The main suggestions may be by the Committee were that—

(1) Diversified courses at the secondary stage should be introduced, one of these courses leading to the University degree ;

(2) The Intermediate stage be abolished and the Secondary stage be extended by one year ; the secondary stage to consist of six years be divided into two, the higher and lower, each covering a period of three years, the whole course thus covering 11 years, five for the primary and six for the secondary ; the general course to be of eight years *i.e.* up to the lower secondary course ;

(3) Vocational training and education should begin after the lower secondary stage ;

(4) The Degree course at the University should extend over a period of three years.

Abbot-Wood Report

In 1936-37, two expert advisers, Messrs. Abbot and Wood were invited to advise the Government "on certain problems of educational reorganisation and particularly on problems of vocational education". One of the basic reasons for instituting this enquiry was "the fact that a large number of University graduates are not securing employment of a kind for which their education qualifies them". The terms of reference included—

"(1) Whether any vocational or practical training should be imparted in primary, secondary and higher secondary schools, and if so, what should be its nature and extent ?

(2) Whether the technical or vocational institutions already in existence can be improved and whether new institutions for vocational or technical training would be required, and if so, to suggest the type of institutions required for the purpose ; the stage at which divergence from the ordinary secondary schools (lower or higher secondary) to such schools should be effected ; and the means to be adopted for effecting such diversion."

The report of Messrs. Abbot and Wood suggested a complete hierarchy of vocational institutions parallel with the hierarchy of institutions imparting general education.

One important result of their recommendations has been that "a new type of technical institution called the Polytechnic has come into existence." The provinces also started technical, commercial or agricultural high schools conducting non-literary courses.

Sargent Report

In 1944, the Central Advisory Board of Education which is an All-India Advisory Body set up by the Government of India, submitted a comprehensive Report on Post-war Educational Development containing certain important recommendations. The report, more popularly known as the Sargent Report after Sir John Sargent who was Educational Adviser to the Government of India, visualised a system of universal, compulsory and free education for all boys and girls between the ages of 6 and 14, the Senior Basic or the Middle School being the final stage in the school career of the majority of the future citizens. It was also recommended by this Committee that at the Middle school stage, provision should be made for a variety of courses extending over a period of five years after the age of 11. These courses while preserving an essentially cultural character should be designed to prepare the pupils for entry into industrial and commercial occupations as well as into the Universities. It was recommended that the High School course should cover six years, the normal age of admission being 11 years and that the High Schools should be of two main types (*a*) academic, and (b) technical. The objective of both should be to provide a good all-round education combined with some preparation in the latter stages for the career which pupils will pursue on leaving schools.

Recommendations of the Central Advisory Board of Education

The Central Advisory Board of Education at their 14th meeting held in January, 1948, considered the question of Secondary Education in the country. In view of its importance in the educational system in the country the Board resolved that a Commission be appointed by the Government of India to :—

(*a*) Review the present position of Secondary Education in India, and

(*b*) make recommendations in regard to the various problems related thereto.

This resolution was endorsed by the All-India Education Conference convened by the Hon'ble Minister for Education in January 1948. In pursuance of these recommendations, the Government of India appointed

a Committee under the Chairmanship of Dr. Tara Chand, the then Educational Adviser to the Government of India. This Committee made some important recommendations on different aspects of Secondary Education. The Report of this Committee was further considered by the Central Advisory Board of Education at its 15th meeting held at Allahabad in 1949 when it was resolved that the Government of India be requested to appoint a Commission for Secondary Education to which the questions raised by some of the conclusions drawn in the Report be referred and that it should, in addition to these items, go into the wider question of the aim, objective and purpose of Secondary Education and the relation of Secondary Education to Basic and University Education. The Board again at its meeting held in January, 1951 reiterated its conviction that the reorganisation of Secondary Education in the country was of such vital importance that the Government of India should appoint a Commission at an early date.

University Education Commission of 1948

In the meantime in pursuance of the recommendations of the Central Advisory Board of Education and also of the Inter-University Board, the Government of India appointed a University Education Commission in 1948 under the Chairmanship of Dr. S. Radhakrishnan. The Commission which had to report primarily on University Education in India had necessarily to review the position of Secondary Education as well and it made certain notable suggestions. The Commission recommended that the standard of admission to University courses should correspond to that of the present Intermediate examination, *i.e.*, after 12 years of the study at School and Intermediate College. The Commission thought it unfortunate that neither the public nor the Government had realised the importance of Intermediate colleges in the Indian educational system, and remarked that "our Secondary Education remains the weakest link in our educational machinery and needs urgent reforms."

This in brief is the history of Secondary Education in India and it will be seen that from early on in the later half of the 19th century stress has been laid on methods of improving secondary education as it was imparted from time to time. It will serve no useful purpose to dwell on the fact that, had the recommendations of the Hunter Commission of 1882 been implemented with some degree of zeal and enthusiasm the whole field of secondary education would have been changed very materially and it would not be necessary at this late stage to discuss the value of diversified courses of instruction, the place of technical, agricultural, commercial and other types of education, the need for making secondary education complete by itself and as a preparation for life and for the duties and responsibilities of citizenship. A perusal of these reports has given the Secondary Education Commission much food for

thought. It has also given room for the sceptical to question the value of reports in the light of past experience. The Commission does not take a pessimistic view. It feels that with the enlightened consciousness of the people and with the Government functioning as a democratic republic, a new era in the furtherance of the right type of education would ere long open before the youth of this country.

II

EXISTING PATTERN OF EDUCATION IN INDIA

Before we consider what should be the pattern of Secondary Education Organisation which would conform to the aims and objectives as outlined by us, we must take note of the existing pattern of education in India.

From an enquiry into the present position of education in different States we find that there is wide variation not only with regard to the different stages of education but also with regard to the particular types of institutions imparting education at each of the stages.

Pre-Primary Stage

At the pre-primary stage, Nursery Schools of various types exist in some States but on a very small scale. At this stage, the child is introduced to the joy of learning through companionship and recreational activities and it is slowly guided in proper habits of life, cleanliness and healthy modes of living as well as in the cultivation of social habits so necessary later for a community life. In several States there are a few such nursery schools run by private organisations or by missions, and where they have been so established, they have done excellent work. The cost involved and the very limited number of trained personnel preclude any large expansion of Nursery Schools. The age of admission to Nursery School varies ; in some States it is between 3 and 5, in some, children are trained up to the age of 7.

Primary and Post-Primary Stage

This stage extends in some States to 4 years and in other to 5 years, the age period being 6 or 7 to 10 or 11. Under the system of Basic Education, the States have introduced Junior Basic Schools corresponding to the primary schools, but their number is still very small in proportion to the total number of primary schools in the different States (*Vide* Appendix V).

Higher Elementary School

In a few States, a type of institution known as the Higher Elementary or Vernacular Middle School exists where all subjects are taught thrugh the mother-tongue and no other language is taught. These

schools cater to the students of the post-primary stage, the duration of the course being three years. The number of such schools is on the decline.

Secondary Schools

At the Secondary School level, there are two divisions, the Junior and the Senior. The Junior stage of secondary schools is known in some cases as middle schools or lower secondary schools and in some as the Senior Basic schools. It covers a period varying in different areas, between 3 and 4 years. In the majority of States, the pattern is one of three years.

High Schools correspond to the senior school stage of secondary schools. In the large majority of cases this stage extends over a period of three years. In a few States the High School period is limited to two years, the Middle School being of four years' duration.

Higher Secondary Schools

The Higher Secondary School is the latest type of institution where the education imparted is in some cases of 3 years, and in some cases 4 years, depending upon the period of study required for the High Schools in the State. The Higher Secondary Schools have been formed by the addition of one year which is taken from the Intermediate stage of the University.

Higher Education

While considering the Secondary stage of education we have also to take note of the higher stages of education. At the University level, the degree course is generally of four years, comprising two years of Intermediate and two years of the degree course. In Delhi State, however, where the Higher Secondary Schools have been established, the degree stage is of three years duration, the Intermediate having been abolished. It is of interest to note that in some other States also like Mysore and Travancore, the experiment of a three years' Degree course has been tried, but owing largely to a lack of co-operation and co-ordination from other Universities, the experiment could not be continued.

Intermediate Colleges

Consequent upon the recommendations of the Sadler Commission, an impetus was given to the starting of Intermediate colleges more particularly in certain States in the North. These colleges have a two-year course and come under the purview of the Board of Secondary and Intermediate Education and not under the control of the University. In other States, however, the four-year degree course is divided into two separate units, one for the Intermediate standard and the other for the

Degree Standard. While the great majority of colleges have a four-year course, the recent increase in the number of students seeking admission to university course of study after their school final stage has led to the starting of Intermediate Colleges of two years' duration in many States.

Professional Colleges

There are a number of professional colleges for the different Faculties of Engineering and Technology, Medicine, Veterinary Science, Agriculture and Commerce to which entrance at present is after the Intermediate stage.

Technical Institutes

These are styled under different names like Trade Schools, Industrial Schools, Occupational Institutes and Polytechnics. There are various technical courses to suit students of the age group of 12 and above so as to enable them at the end of the course to join a trade, industry or an independent vocation.

Polytechnics

In several States, Polytechnics have been established where the duration of the course varies according to the type of vocation contemplated.

In some States both at the Middle School stage and more particularly at the High School stage diversified courses of instruction have been introduced, so that the pupil at this stage may have a choice of one or another of the courses given. These courses may be in Agriculture, Technology, Art and Craft Training, Secretarial Practice, Domestic Science and Home Craft, or in subjects pertaining to general knowledge.

From what has been stated above, it will be seen that a variety of different types of schools exist in the States, and that more recently certain new types of schools have been established for definite vocational pursuits, catering to the aptitudes of the students concerned.

CHAPTER III

REORIENTATION OF AIMS AND OBJECTIVES

I

Defects of the Existing System

During our tour many witnesses expressed disappointment with the present set-up of Secondary Education and referred to various defects which, in their opinion, made it wasteful and ineffective and hindered the realisation of its true aims and objectives They pointed out that this education was too bookish and mechanical, stereotyped and rigidly uniform and did not cater to the different aptitudes of the pupil or to pupils of different aptitudes. Nor did it develop those basic qualities of discipline, co-operation and leadership which were calculated to make them function as useful citizens. The stress on examinations, the over-crowded syllabus, the methods of teaching, and lack of proper material amenities tended to make education a burden rather than a joyous experience to the youthful mind. The unilateral scheme of studies which concentrated almost entirely on preparing students for entrance to the University, was not calculated to bring out the best either in the teacher or in the pupils. Again the failure to provide diversified courses of study make it difficult for many students to secure suitable employment at the end of the course. In most cases, a rigid time-table, unsuitable text-books of poor quality and the unduly detailed syllabus prescribed did not give the teachers sufficient opportunity for self-expression or for developing self-reliance and did not create the habit of independent thinking in their pupils. Another great handicap was the large number of pupils in each class, making it impossible for the teacher to establish close personal contacts with his pupils or to exercise proper educative influence on their minds and character. On account of the educational expansion that has taken place during the last few decades, many children now seeking education come from homes where there is little of an educational atmosphere and consequently little or no opportunity of supplementing the education given at the school. This fact adds considerably to the responsibilty of the school which it is not at present in a position to discharge. Nor can we overlook the fact that the teaching profession does not attract a sufficient number of the right type of teachers with the requisite personal qualities and aptitudes and a spirit af devotion to their work. Because of the large number of teachers required, recruitment has been haphazard and a careful selection has been the exception rather that the rule. Again there are inadequate facilities for those co-curricular activities which provide an excellent medium for training the mind and emotions as well

as the practical aptitudes of students, promote their physical welfare and inculcate in them social qualities necessary for successful community life. Few schools make proper position for playing fields or for group games and other recreational activities which give vitality and joyousness to school work and help in the education of the children's total personality.

One could go on adding to this list of defects enumerated by the witnesses. But it seems unnecessary since all who have had any contact with these schools as teachers or parents can enumerate many other defects and handicaps of the present system. It would, however, be useful to view them coherently and spot-light what we consider to be the basic short-comings and defects of the present secondary school because that would provide the starting point for a discussion of the methods of reform and reconstruction.

Firstly, the education given in our schools is isolated from life—the curriculum as formulated and as presented through the traditional methods of teaching does not give the students insight into the every day world in which they are living. When they pass out of school they feel ill-adjusted and cannot take their place confidently and competently in the community. Unless the school is itself organized as a community and is in vital *rapport* with outside community life, this situation cannot be remedied. *Secondly,* it is narrow and one-sided and fails to train the whole personality of the student. For many decades, it has provided only academic instruction which meant teaching him a certain number of subjects which either gave information which the adults considered useful or trained him in certain skills like reading and writing. The "non-cognitive" aspects of his personality—his practical aptitudes, his emotions, his appreciation, his tests—were largely ignored. Recently, games, crafts and certain types of social activities have been given a place in the school programme, but they are still not regarded as an integral part of the curriculum. On the whole, it is still true that our education caters only for a segment of the student's whole personality. *Thirdly,* until comparatively recently English was both the medium of instruction and a compulsory subject of study. Students who did not possess special linguistic ability were therefore greatly handicapped in their studies. If a student did not fare well in English he could neither pass the School Final Examination nor find any post in Government Service. The other subjects, which were psychologically and socially important or congenial were not given greater attention. *Fourthly,* the method of teaching generally practised failed to develop in the students either independence of thought or initiative in action. They stressed competitive success rather than the joy of co-operative achievement. It is a matter of common complaint that lessons are imparted in a mechanical way giving information which is reluctantly memorized by the students. *Fifthly,* the increase in the size of classes has considerably reduced personal contact

between teachers and pupils. Thus the training of character and inculcation of proper discipline have been seriously undermined. The situation has been further aggravated by the fact that the average efficiency of the teachers has deteriorated ; their economic difficulties and lack of social prestige have tended to create in them a sense of frustration. Unless something is done quickly to increase their efficiency and give them a feeling of contentment and a sense of their own worth, they will not be able to pull their full weight.

Finally, the dead weight of the examination has tended to curb the teachers' initiative, to stereotype the curriculum, to promote mechanical and lifeless methods of teaching, to discourage all spirit of experimentation and to place the stress on wrong or unimportant things in education.

In this chapter we have naturally focussed our attention only on the defects of the present system, because sound reconstruction depends on their proper diagnosis. It should not, however, be taken to mean that it has no good features or that it has played no useful role at all, in the life of the nation. Its main handicap has been that it started with a limited and wrong objective. Naturally, therefore, its later development took place within the limitations of that objective. Many piecemeal reforms and improvements have been introduced from time to time as we have hinted above but they were not coherently and consciously related to the right aims and objectives and, therefore, their total impact on the system was unimpressive. What is necessary now—and this is what we are anxious to ensure—is to take bold and far-sighted measures to give a new orientation to secondary education as a whole, in which all these individual reforms may find their proper and integrated place.

II

AIMS OF SECONDARY EDUCATION

The aims of education have been formulated in general terms in numerous books on education and in the Reports of Committees and Commissions and, therefore, so far as such general aims are concerned, it is not possible to add anything significant to what has been repeatedly expressed. But there is undoubtedly room for formulating these aims in more specific terms and with special reference to the needs and the ideals of our country in its actual situation. As political, social and economic conditions change and new problems arise, it becomes necessary to re-examine carefully and re-state clearly the objectives which education at each definite stage, should keep in view. Moreover, this statement must take into account not only the facts of the existing situation but also the direction of its development and the nature and type of the social order that we envisage for the future to which education has to be geared.

Educational Needs of Democratic India

The most outstanding and educationally relevant facts that have to be taken into account may be briefly summed up as follows. India has recently achieved its political freedom and has, after careful consideration, decided to transform itself into a secular democratic republic. This means that the educational system must take its contribution to the development of habits, attitudes and qualities of character, which will enable its citizens to bear worthily the responsibilities of democratic citizenship and to counteract all those fissiparous tendencies which hinder the emergence of a broad, national and secular outlook. Secondly, though rich in potential resources, India is actually a poor country at present ; a large majority of its people have to live at an economically sub-human level. One of its most urgent problems—if not the most urgent problem—is to improve productive efficiency, to increase the national wealth and thereby to raise appreciably the standard of living of the people. Thirdly, partly as a result of this oppressive and widespread poverty, there is a serious lack of educational facilities and the bulk of the people are so obsessed with the problem of making some sort of a living that they have not been able to give sufficient attention to cultural pursuits and activities. Hence there is need for reorienting the educational system in such a way that it will stimulate a cultural renaissance.

From this necessarily sketchy analysis of the dominant needs of the present situation, it is clear that we shall have to formulate our aims with reference to these broad categories—the training of character to fit the students to participate creatively as citizens in the emerging democratic social order ; the improvement of their practical and vocational efficiency so that they may play their part in building up the economic prosperity of their country ; and the development of their literary, artistic and cultural interests, which are necessary for self-expression and for the full development of the human personality, without which a living national culture cannot come into being. We propose to consider each one of these briefly in order to indicate their implication in more concrete terms.

Role of Education in Developing Democratic Citizenship

Citizenship in a democracy is a very exacting and challenging responsibility for which every citizen has to be carefully trained. It involves many intellectual, social and moral qualities which cannot be expected to grow of their own accord. In any kind of regimented social order, the individual does not need to indulge in the travail of independent thinking or of chalking out his own lines of action. The authorities relieve him of that onerous responsibilities ! But in a democracy—if it is anything more than the thoughtless exercise of the vote—an individual must form his own independent judgment on all kinds of complicated social, economic

and political issues and, to a large extent, decide his own course of action. The Secondary Education, which would be the end of all formal education for the majority of the citizens, must assume the responsibility of providing the necessary training for this purpose. The first requisite in this connection is to develop the capacity for clear thinking and a receptivity to new ideas. On the intellectual side, the school should perhaps accord the highest priority to the cultivation of this quality, which is the distinguishing mark of an educated mind. A democracy of people who can think only confusedly can neither make progress, nor even maintain itself, because it will always be open to the risk of being misled and exploited by demagogues who have within their reach today unprecedentedly powerful media of mass communication and propaganda. To be effective, a democratic citizen should have the understanding and the intellectual integrity to sift truth from falsehood, facts from propaganda and to reject the dangerous appeal of fanaticism and prejudice. He must develop a scientific attitude of mind to think objectively and base his conclusions on tested data. He should also have an *open* mind receptive to new ideas and not confined within the prison walls of out-moded customs, traditions and beliefs. It should neither reject the old because it is old nor accept the new because it is new, but dispassionately examine both and courageously reject whatever arrests the forces of justice and progress. We shall discuss later, in dealing with educational methods, how such a mind is to be developed through education. What we wish to stress here is the need for teachers to appreciate that this is one of the most important aims that should consciously inspire their educational ideas and technique. They should realize that the type of lessons usually given in our class-rooms, which only call for passive assimilation, can make no contribution to the development of this type of mind.

Closely allied to clarity of thought is clearness in speech and in writing. This is not only an important social asset, it is also an essential pre-requisite for successful living in a democracy which is based *not* on force but on free discussion, persuation, and peaceful exchange of ideas. To be able to make one's influence felt and to assist in the formulation of healthy public opinion, an educated person should be able to express himself clearly both in speech and writing.

A democracy is based on faith in the dignity and worth of every single individual as a human being. This innate "worthfulness" cannot be eclipsed either by economic or racial or social consideration. The object of a democratic education is, therefore, the full, all-round development of every individual's personality. This requires that education should take into account all his needs—psychological, social, emotional and practical—and cater to all of them. The view of education that emerges from this basic concept transcends the narrow academic approach and broadens out into an *education for living*, i.e. an education to initiate the

students into the many-sided art of living in a community. It is obvious, however, that an individual cannot live and develop alone. Both for his own wholesome development and the good of society, it is essential that he should learn to live with others and to appreciate the value of co-operation through practical experience and free interplay with other personalities. No education is worth the name which does not inculcate the qualities necessary for living graciously, harmoniously and efficiently with one's fellowmen. Amongst the qualities which should be cultivated for this purpose are *discipline, co-operation, social sensitiveness and tolerance*. Each one of them has its own special part to play in the humanizing and socialising of the personality. Discipline is an essential condition for successful group work. An indisciplined person can neither make any effective contribution to the completion of any corporate project nor develop qualities of leadership. For various reasons, which we have discussed elsewhere, standards of discipline have become deplorably lax in recent decades and a special effort needs to be made to improve them. If this is done through the adoption of intelligent and psychologically sound methods, to which we have referred in another chapter, it would be a most valuable contribution to the development of national character and would provide an important guarantee of the success of our democratic experiment.

This discipline cannot, however, be developed in a vacuum ; it is the fruit, the valuable by-product, of co-operative work, willingly undertaken and efficiently completed. The school must aim at strengthening the desire for co-operation and afford students opportunities to translate it into practice. This co-operation must, however, be inspired by the faith that social purposes are worth striving for, that life in a democratic set-up is not playing for one's own hand but calls for a strenuous endeavour to equalize opportunities for all and an unremitting fight for justice for the under-privileged. A passion for social justice, based on a sensitiveness to the social evils and the exploitation which corrupts the grace of life, must be kindled in the heart and mind of our people and the foundations for it should be laid in the school. Through it the child and adolescent should not only get a coherent picture of the world in which they are living but also be introduced to the standards by which its customs, practices and institutions are to be judged. This social sensitiveness is the ethical basis of good character ; without it efficiency, discipline, co-operation and many other fine qualities may either remain unfructuous or may be corrupted for baser purposes. And finally, we must stress the importance of *tolerance*, without which it is impossible to preserve the health and even the existence of a democracy. The essence of a democratic society is not only the tolerating but the welcoming of differences which make for the enrichment of life. Dragooning different beliefs, ideas, opinions, tastes and interest into uniformity may possibly

make for efficiency in a narrow and inferior sense but it inevitably impoverishes life and curbs the free expression of the human spirit. If a democracy like ours is to survive—a democracy which harbours so many faiths, races and communities—education must cultivate in our youth an openness of mind and largeness of heart which would make them capable of entertaining and of blending into a harmonious pattern differences in ideas and behaviour. It is possible for every school to do so, not only through the proper presentation of the various school subjects—particularly the humanities and social studies—but also by utilising the resources and opportunities provided by the fact that its students are drawn from different, castes creeds and classes. If they can first learn to live pleasantly and peacefully in the small community of the school, this training will enable them to do so later in the larger community outside. Another important aim which the secondary school must foster is the development of a sense of *true patriotism*. In the proper interpretation of this aim, the adjective 'true' is as important as the noun ! The propriety of inculcating, through education, a deep love of one's own country, is too obvious to require any justification, but in doing so it is necessary to take care that this love does not degenerate into nationalistic jingoism. True patriotism involves *three* things—a sincere *appreciation* of the social and cultural achievements of one's country, a readiness to *recognize its weaknesses* frankly and to work for their eradication and an earnest *resolve to serve it* to the best of one's ability, harmonizing and subordinating individual interests to broader national interests. The school must address itself to building up this rich, threefold concept of patriotism. Through a proper orientation and presentation of the curriculum it can make the students appreciative and proud of what their country has achieved in literature and science, art and architecture, religion and philosophy, crafts and industries and other fields of human endeavour. This feeling can be quickened and made more vital through the organization and celebration of suitable functions and extra-curricular activities. It has to be linked up, however, with a critical appraisal of the total picture of national life and—to the extent that such appraisal is within the mental capacity of students at this stage—it should be inculcated and encouraged by the school. The capacity for clear and objective thinking that we have commended as a significant educational aim should be brought into play in this connection—particularly in connection with the teaching of social studies—and the students should learn the great truth that an appreciation of what is good in one's heritage is one aspect of patriotism, but equally so is the rejection of what is unworthy and the desire to improve it. There is no more dangerous maxim in the world of today than "My country, right or wrong". The whole world is now so intimately interconnected that no nation can or dare live alone and the development of a sense of world citizenship has become just as important as that of national citizenship. In a very real sense, therefore, "Patriotism

is not enough" and it must be supplemented by a lively realization of the fact that we are all members of One-World, and must be prepared, mentally and emotionally, to discharge the responsibilities which such membership implies. We need not discuss here the various methods that can be employed to achieve this object. A number of very interesting and significant experiments have been, and are being, tried in many schools throughout the world to develop international understanding and these can be studied with profit.

Improvement of Vocational Efficiency

So far as the second major element in our national situation is concerned, we must concentrate on increasing the productive or technical and vocational efficiency of our students. This is not merely a matter of creating a *new* attitude to work—an attitude that implies an appreciation of the dignity of *all* work, however "lowly", a realisation that self-fulfilment and national prosperity are only possible through work in which *every* one must participate and a conviction that when our educated men take *any* piece of work in hand they will try to complete it as efficiently and artistically as their powers permit. The creation of this attitude must be the function of every teacher and it must find expression in every activity of the school. Students must acquire a yearning for perfection and learn to take pride in doing everything as thoroughly as they can ; likewise teachers should learn to reject, firmly but with sympathy, all work that is half-hearted or slipshod, or casual. We shall revert to this point again in our discussion of educational methods. Side by side with the development of this attitude, there is need to promote technical skill and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of industrial and technological advancement. In the past, our education has been so academic and theoretical and so divorced from practical work that the educated classes have, generally speaking, failed to make enormous contribution to development of the country's natural resources and to add to national wealth. This must now change and, with this object in view, we have recommended that there should be much greater emphasis on crafts and productive work in *all* schools and, in addition, diversification of courses should be introduced at the secondary stage so that a large number of students may take up agricultural, technical, commercial or other practical courses which will train their varied aptitudes and enable them either to take up vocational pursuits at the end of the Secondary course or to join technical institutions for further training. These measures will, we hope, result in equipping educated young men —psychologically and practically—to undertake technical lines and raise general standard of efficiency, thereby helping to increase national wealth and ultimately to inprove the general standards of living.

Development of Personality

The third main function of Secondary Education is to release the sources of creative energy in the students so that they may be able to appreciate their cultural heritage, to cultivate rich interests which they can pursue in their leisure and so contribute, in later life, to the development of this heritage. In the past, our schools have left whole areas of the pupil's personality untouched and unquickened— their emotional life, their social impulses, their constructive talents, their artistic tests. That explains why a majority of them emerge with no inner resources of interests which can be cultivated and pursued as pleasant or useful hobbies. It is in view of this serious short-coming in our educational programmes that we have recommended, in the chapter on 'Curriculum,' that a place of honour should be given to subjects like art, craft, music, dancing and the development of hobbies. We hope that, as education is organised on the basis of freedom and its scope is widened to include many new subjects and activities and as the pupils go out with more sensitive and quickened minds that can respond readily to the numerous stimuli in the world of Art and Nature, they will be able not only to enjoy their cultural heritage more keenly but also help in its enrichment.

Education for Leadership

In discussing these aims, it is important to bear in mind the special characteristics of this particular stage of education. Secondary Education in its ideology and approach, should grow from the education that is being given at the mass level and should consequently be closely integrated with Basic Education. The child should not feel on passing from the Basic, or activity motivated primary school that there is a violent break in methods of work and teaching or in the concept of the curriculum. The ideas of productive work, of the vital relationship of the curriculum to life, of community living and community service must all find a place in it, which such modifications as the psychology of adolescence may render necessary. Secondly, as a stage leading to higher education, it may also be reasonably expected to develop the knowledge and skill and the mental habits required for independent work at the University level. But, as has been pointed out elsewhere, the integral unity of Secondary Education as well as the entire outlook of teachers and parent towards it has been seriously vitiated by the fact that they have been apt to regard it as mainly a stepping stone to the University. It has consequently been geared almost entirely to the passing of the Examination which will open the gateway to the University. This has inevitably resulted in many other important aims being ignored or side-tracked. It must be remembered that, for a large majority of students, it marks the completion of their formal education and, therefore, it should be viewed primarily as a stage complete in itself with its own ends and special purposes. On passing out of the Secondary School, such students, as do not propose to join college

or technical institutions, should be able to enter on the various walks of life and fill the role of, what may be called, leadership at the intermediate level. A democracy cannot function successfully unless *all* the people—not merely a particular section—are trained for discharging their responsibilities and this involves training in discipline as well as leadership. The Primary or Basic School will inculcate in *all* the capacity for disciplined work while the University will train leadership at the highest level in different walks of life. The special function of the Secondary School, in this context, is to train persons who will be able to assume the responsibility of leadership—in the social, political, industrial or cultural fields—in their own small groups of community or locality. This does not, of course, mean that primary education will not throw up leaders—in fact, with the proper functioning of demoracy, it is to be hoped that leadership will be increasingly drawn from the masses. But leadership in the wider sense of the word (which is not synonymous with *political* leadership) calls for a higher standard of education, a deeper and clearer understanding of social issues and greater technical efficiency. All these must be provided by our Secondary Schools in increasing measure. The secondary school must make itself responsible for equipping its students adequately with civic as well as vocational efficiency—and the qualities of character that go with it—so that they may be able to play their part worthily and competently in the improvement of national life. They should no longer emerge as helpless, shiftless individuals who do not know what to do with themselves and can only think of either crowding the colleges—which, for the majority, are a *cul-de-sac* or, as a last and reluctant resort, take up some clerical or teaching job for which they have no natural inclination. It is true that the economy of the country is still undeveloped and there are not sufficient ready-made openings for educated youth. Obviously, however, this situation will *not* be cased if, to the paucity of openings, is added the further handicap of a type of training that fails to develop initiative, resourcefulness and practical aptitudes and a type of mind which passively accepts things as they are instead of trying to forge new openings. In any case, with the new schemes in hand, this situation is improving and Secondary Education must address itself to the training of competent personnel for this expanding scope of opportunities.

CHAPTER IV

NEW ORGANISATIONAL PATTERN OF SECONDARY EDUCATION

I

In the description that we have given of the existing pattern of institutions catering for the different age periods, it will be seen that there is considerable diversity in the different States. This is to be taken into consideration in planning the new organisational pattern of secondary education. It is obvious that for an interim period, some provisional adjustments will have to be made so that the change over from the existing to the new pattern may take place without serious dislocation.

Duration of Secondary Education

We have to bear in mind the principle already noted that secondary education is a complete unit by itself and not merely a preparatory stage; that at the end of this period, the student should be in a position, if he wishes, to enter on the responsibilities of life and take up some useful vocation. The age at which the child is to begin his secondary education and the age up to which it should be continued is, therefore, a matter of considerable importance. It is now generally recognised that the period of secondary education covers the age group of about 11 to 7 years. Properly planned education, covering about 7 years, should enable the school to give a thorough training in the courses of study taken up by the student and also help him to attain a reasonable degree of maturity in knowledge, understanding and judgment which would stand him in good stead in later life. It has been repeatedly pointed out by all concerned with education that at present the standard attained by students who seek admission to the University and to other higher courses is low and that the average age of entrance is also low. A somewhat longer period of training, before entrance to the University, is likely to be useful both for those who want to pursue higher education and for those who finish their education at this stage. Judging by the requirements of several of the diversified courses that we have in view, we feel that a somewhat longer period of training will be necessary if they have to be taught with thoroughness and efficiency. The various arguments that have been adduced in favour of this view have led us to the conclusion that it would be best to increase the secondary stage of education by one year and to plan the courses for a period of four years, after the middle or senior Basic stage. At the same time, we realize that the total period of training required at present for higher education cannot and should

not be increased, because of the large financial implications for educational authorities as well as for the students. We have, therefore, come to the conclusion—which also tallies with the view of the University Education Commission in this connection—that it is desirable to abolish the present Intermediate stage, to increase the period of secondary education by one year and to plan a three-year degree course at the University stage.

There is one important point which needs to be clarified with reference to our recommendation that the period of secondary education should cover the age group 11 to 17. We are fully aware that the scheme of Basic Education, which has been accepted by Government as the approved pattern at the stage of mass education, covers the age group 6—14. It may seem therefore that our scheme partly overlaps, or even interferes with, the pattern of Basic Education. It is, however, not really so. In the first place, the scope of Basic Education, as defined in the Report of the Zakir Husain Committee and subsequent Reports of the Central Advisory Board of Education, covers not only the stage of primary education, as generally understood in India, but also a part of secondary education. Thus the Senior Basic stage really falls within the age group of secondary education and we have included it there accordingly. In order to obviate any clash with the Basic School, we have recommended that the general lay-out and standard of syllabus in the Senior Basic, Middle and Lower Secondary Schools should be largely similar. Secondly, in formulating our recommendations in this behalf, we have had to take into consideration the fact the number of full Basic Schools in the country is still comparatively small and the very large majority of schools which cater for the age group 11 to 14 are ordinary Middle or Lower Secondary Schools, which will take a long time to be converted into Senior Basic Schools. We have, therefore, to provide in our proposals for the improvement and reconstruction of these schools and classes also. Our proposals aim at bringing some of the important principles of Basic Education into the educational life of all children of this age group while the fully converted Basic Schools will be free to follow their own lines of natural development.

Keeping this broad outline in view, we recommended the following new organisational structure for secondary education after the 4 or 5 years of Primary or Junior Basic Education :

(i) A Middle or Junior Secondary or Senior Basic stage which should cover a period of 3 years ;

(ii) A Higher Secondary stage which should cover a period of four years.

It must, however, be clearly understood that, in the planning of the curricula at these three successive stages (including the Primary) there must be an organic continuity so that each stage will lead on to the next

and there will be no abrupt break. Particular care will have to be taken to ensure that the education imparted during the first eight years in the Primary (or Junior Basic) and the middle (or Senior Basic) stage forms an integrated and complete whole, so that when free and compulsory education is extended upto the age of 14, as envisaged in the Constitution, it will constitute a uniform pattern of education.

Transitional or Stage Development

The practical problem that we have to face in this connection is how these suggestions can best be implemented, with due regard to the existing structure of education in the country. We have already referred to the different types and grades of schools and colleges that are at present functioning in different States. While we expect that ultmately the duration of secondary education will be uniform in all States, we realise that it is not possible to achieve this objective in the immediate future. The large majority of the existing High Schools are unable at present to undertake the responsibility of offering an additional year's education to their pupils. In fact, in view of the overcrowding of the classes, the large number of sections allowed in each form and the lack of trained teachers, we realise that it would be unsound to expect many High Schools to take on the additional year and convert themselves into the contemplated higher secondary schools. For some time, therefore, we have necessarily to envisage the likelihood of two types of schools—the existing high schools of the present kind and the higher secondary schools, which will provide an additional year's training and prepare the students for the higher secondary stage.

The Future of Intermediate Colleges

Turning to the Intermediate Colleges, we feel that there should be a gradual change in their structure to fit in with the proposed scheme of higher secondary education of four years, followed by the degree course of three years. Some Intermediate Colleges, which have also a high school under the same management, may be in a position to convert themselves to higher secondary schools, eliminating the senior intermediate class. The conditions under which such a reorganization should be allowed will be dealt with later. Such of the Intermediate Colleges as have proper accommodation and equipment, can provide staff of the required qualifications and can command the necessary finances, may convert themselves into degree colleges of three years duration, admitting students who have completed the higher secondary stage. In the case of colleges which provide a four year course, two for the intermediate and two for the degree, we would recommend the organisation of a three year degree course, with a pre-university course of one year for students who pass out of the high school so that they may have a year's special training before they join the University. Thus it is obvious that, for several years to

come, there will be simultaneously high schools from which students will take the Secondary School Leaving Certificate and the higher secondary schools where they will take the Higher Secondary School Leaving Certificate. Should any of the students who passes with the S.S.L.C. wish to follow the University course, he will have to spend one year in the pre-University course of study and thus qualify himself for entrance to the University. The object of this pre-University year is to prepare the student for the three-year degree course or for a professional course. The scheme of studies to be covered in this year will have to be planned with due regard to the needs of the Degree (or the professional) courses to be taken up by the students. Special emphasis will have to be laid during this year on three things—the study of English, so long as it is the medium of instruction at the University ; training in the technique of independent study required at the University and giving students a broad general knowledge and understanding of contemporary social and political situation as well as the part played by modern science in it. In any case, we recommend that the scheme of studies for this year should be carefully formulated because we are convinced that if it is properly done, it can provide a useful and attractive preparatory training for higher education and bridge the abrupt gulf which exists at present between the Secondary School and the University.

We were told that, in some States where the secondary course has been extended from 3 to 4 years and the Higher Secondary Leaving Certificate Examination has been instituted, students who have gone to the University have proved themselves distinctly superior to those who come from the high schools. It is not merely the additional year's training that is in their favour but the greater degree of intellectual maturity that they acquire during these four years of compact secondary education.

A Three-Year Degree Course

The recommendation that the degree course should consist of three years has been reiterated by successive Commissions but it has not been implemented yet to any great extent, There are, however, cogent reasons for this proposal. At present, both in the Junior Intermediate class and in the Junior B.A. class, much time is lost in trying to adjust and re-orient the students to the new institution and the new courses taken up by them as well as to change in the methods of study. The abolition of a separate Intermediate stage and of the Intermediate Examination and the institution of a three-year degree course would undoubtedly lead to a considerable saving of time and a better planning of educational programmes and activities during the three-year degree period. The Intermediate examination is also a handicap because it breaks up the continuity of the college course and makes a proper planning for the Degree Course difficult. Thus the addition of one year to the secondary school

stage will add to the efficiency of the training given there, and also improve educational efficiency at the University stage by providing a continuous and compact period of three years education. We are strengthened in this recommendation by the bulk of evidence given by the Univsrsity representatives.

We shall now deal with some of the steps that may have to be taken to establish the proposed pattern of secondary education and also indicate how the various types of colleges will fit into it. It is by no means our intention to encroach on the University's purview but it is necessary to give our views about the follow-up stage of education in the hope that the Universities, which are the competent authorities in the matter, will give their consideration to our tentative proposals which, as we have already pointed out, are generally in consonance with the views of the University Commission.

High Schools and Higher Secondary Schools

As already pointed out it will not be possible to convert all existing high schools into higher secondary schools in the near future. In the case of such schools, the problem would be to improve their efficiency within their present structure and the recommendations that we have made elsewhere to reconstruct the curriculum and methods of education will apply to them also. In other ways too, considerable improvements will be needed to make them more efficient and to enable them to be converted ultimately into Higher Secondary Schools. These improvements should include the provision of better qualified and more carefully selected personnel, better equipment, better laboratory and liabrary facilities and better organization of co curricular activities. In addition, the scheme of diversified courses of study recommended by us elsewhere, should also be introduced as far as possible.

A number of schools will, however, be in a position to add the additional year to their course and convert themselves into Higher Secondary Schools. If these schools are to develop into efficient institutions capable of achieving the objectives in view, it is necessary that their recognition should be governed by carefully defined and strict conditions, which must be fulfilled scrupulously before such recognition is given.

These conditions should prescribe special criteria for

(1) Accommodation

(2) Equipment

(3) Qualifications of the staff

(4) Salaries and Grades and

(5) Adequate finance to ensure that the institution will continue to function efficiently. Such assurance must be offered either by the

management itself or be provided on the basis of help guarnteed by the State and Central Governments. Suggestions regarding the nature of these conditions have been given elsewhere.

Degree Colleges

There are two varieties of such colleges. In some States these Colleges offer a two-year degree course, in others a four-year course—two for the Intermediate and two for the degree stage. In the case of two-year degree colleges, we recommend that they should add one year to the degree course and convert themselves into full three-year degree colleges, with necessary additions, by way of staff and accommodation. In the case of four-year degree colleges, we recommended that they should retain the first year as a pre-University year for those who have completed the High School stage and want to take up the degree course. The other three years will form the degree course proper. Thus the college will be able to cater for both types of students—those who have passed from the High Schools and those who have passed from the Higher Secondary Schools.

Professional Colleges

At present the minimum qualification required for admission to the Colleges of Engineering. Medicine, Agriculture, Veterinary Sciences, etc. is the Intermediate. There have been criticisms that students who passed the Intermediate did not possess adequate knowledge of, and training in, the subjects needed for the various professional courses. To meet this criticism, it seems desirable that before taking up these courses one year of intensive study should be undertaken by all students in the pre-professional subjects concerned. The admission to these pre-professional courses should be open—

(*a*) to those who have completed their Higher Secondary course, and

(*b*) to those who have successfully completed their High School course and have, in addition, put in a year's course at the pre-University class.

In the case of those candidates who have taken diversified course in the Higher Secondary Schools, the question of the possibility of exempting them from some portion of their studies in the respective professional colleges in the light of their achievements in the schools may be considered by the authorities concerned.

We would prefer that the pre-professional course should be offered in the professional colleges concerned, but if they are not in a position to start these courses, they may, during the transitional stage, be given in some of the degree colleges where necessary facilities are available.

Technical and Vocational Education

We expect that at the successful conclusion of the secondary course, a majority of students will take up some suitable vocational pursuit and in due course achieve a reasonable degree of competence in it either through practice and experience or through apprenticeship training. But there would be many who would like, and would be in a position, to pursue higher studies. For such students, Polytechnics or Technological institutions should be available where technical courses covering two or more years would be provided. They should be eligible to take the Certificates or Diplomas awarded by the State or by the All-India Council for Technical Education. Those who take the Higher Secondary Certificate with vocational subjects may be exempted from the first year of the course, while those who obtain the High School Certificate should be required to put in the full period of training. These courses of studies will have to be planned by the expert Boards of Studies set up by the States or by the All-India Council for Technical Education.

Need for Diversification of Courses

In view of the fact that education up to the age of 14 has been made free and compulsory under the Constitution, students with a very wide variety of talents will be seeking education in future. This postulates that our secondary schools should no longer be "single-track" institutions but should offer a diversity of educational programmes calculated to meet varying aptitudes, interests and talents which come into prominence towards the end of the period of compulsory education. They seould provide more comprehensive courses which will include both general and vocational subjects and pupils should have an opportunity to choose from them according to their needs. It is necessary to point out clearly that this diversification of courses and the introduction of many practical subjects at the secondary stage does not mean that something called "general" or "cultural" education is to be provided for one group of students, while others are to be given a narrow "practical" or "vocational" or "technical" education. The whole modern approach to this question is based on the insight that the intellectual and cultural development of different individuals takes place best through a variety of media, that the book or the study of traditional academic subjects is not the only door to the education of the personality and that, in the case of many—perhaps a majority—of the children, practical work intelligently organized can unlock their latent energies much more successfully than the traditional subjects which address themselves only to the mind or worse still, the memory. If this principle is clearly understood by educationists, they will see to it that these various courses are accorded priority of esteem and students are helped to select them with due regard to their natural interests and talents. In view of the fact that they have

all to be trained in certain basic ideas, attitudes and appreciations, which are essential for playing the role of intelligent citizens in a democracy, there should be a certain common core of subjects of general value and utility which all students may study. But the wise teacher should realize that the other special practical subjects can also contribute, provided they are rightly taught, to the all-round education of the students, making them productive, co-operative, well-balanced and useful members of society.

Multilateral or Multipurpose Schools.

We have recommended the introduction of diversified courses which will be provided in multilateral or multipurpose schools. A multipurpose school seeks to provide varied types of courses for students with diverse aims, interests and abilities. It endeavours to provide for each individual pupil suitable opportunity to use and develop his natural aptitude and inclinations in the special course of studies chosen by him. The main advantages claimed for it are :

(1) It removes all invidious distinction between students preparing for different courses of studies, breaking down the sense of inferiority that is associated with vocational subjects and makes it possible to plan the educational system on a truly democratic basis.

(2) It provides a greater variety of educational media and thereby facilitates proper educational guidance in the choice of studies.

(3) It helps to solve the problem of the wrongly classified pupil, because transfer within the same school is easier to arrange than transfer from one school to another.

While we advocate the starting of a certain number of multipurpose schools, it is not our intention to suggest that all should be of the same type. There will be room for unilateral schools also where intensive training will be provided in particular types of vocational courses according to the occupational needs of the community and the locality. The different vocational subjects to be included in the multipurpose schools will be discussed in connection with the reorganised curricula of studies.

Agricultural Education in Secondary Schools

We would, however, like to make a special reference here to the teaching of Agriculture. Agriculture is the most important industry of the country, providing employment for over 75% of the population and, forming the main occupation in the rural areas. The need, therefore, to educate the youth of the country to a proper appreciation of the role that agriculture plays in the national eeonomy must be stressed in all schools. In view of its basic importance, we recommend that all States should provide much greater opportunities for Agricultural Education in rural

schools, so that more students may take to it and adopt it as a vocation. At present there are not many schools which have agriculture as a subject of study, and even where it does exist, the instruction given is so theoretical and divorced from practical application that it does not serve any useful purpose. As the training in agriculture has to be largely provided in the field, the student should have an opportunity to work under realistic conditions for a considerable part of his study so that he may acquire the right approach to agriculture. He should take to it with the same interest and earnestness as the farmer, not as a drudgery but as a matter of delight and self-expression in productive work. To give an idea of what has been achieved in the United States in the field of Agricultural Education, we have appended a note on the subject furnished by our colleague, Dr. K.R. Williams. (Appendix VI.)

With agriculture two other allied subjects should be closely integrated—Horticulture and Animal Husbandry. If the study of Agriculture is to lead to any positive results, the student must be trained not merely in the mechanics of agricultural operations but also in those subsidiary occupations that a farmer should know in order to utilise his leisure profitably in the off-season. So far not much attention has been given to horticulture in the scheme of Secondary education. In the course of our tour, we have seen how in certain regions, *e. g.*, in the hilly areas of Himachal Pradesh. horticulture can become a most useful subject leading to scientific utilization of land and providing very profitable vocation. We were given to understand in Himachal Pradesh that a number of schools were being started in the rural areas with adequate plots of land to be utilised for training in horticulture. The profits derived from the produce were utilized for augmenting the resources of the school and thus enabling the pupils to earn while they learn. It goes without saying that in all schools offering agriculture as a special subject, adequate plots of land should be available for cultivation and students should be trained to carry out all the operations necessary for the purpose. Moreover, the teaching should be so planned as to bring out its scientific aspect properly so that pupils may gain adequate knowledge of the allied sciences of Botany, Climatology, the nature of the soils and seed, and the different pests that affect agricultural plants.

We have emphasised the need for students trained in agriculture to settle on land and to have the necessary training to make their living in the off-season also, so as to avoid the partial unemployment which besets agricultural labour in off-seasons. Animal husbandry is one of the important vocations which can meet this need. This includes sheep-farming, poultry farming, maintenance of cows and bulls, and dairying etc. The training in such occupations should be treated as part of the course in agriculture.

It is also necessary that suitable types of cottage industries be taught in agricultural schools. The particular industry chosen for a school will depend upon its location, the facilities available and the requirements of the region. It may be spinning and weaving, or leather work or pottery or basketry or carpentry or some other artistic or useful craft. It may be some other small cottage industries like those carried on in Japan, which can be introduced with the help of electricity that will soon become available through the large hydro-electric projects that have been undertaken. Some students in these schools may also profitably study the methods adopted by co operative societies for the collection and sale of products of agriculture and animal husbandry and of cottage industries.

The question has been raised whether independendent agricultural schools should be organized or should the teaching of agriculture be provided only in multi-purpose schools. We are of opinion that, in urban as well as rural areas, children should have an opportunity to pursue the type of education that is best fitted to their needs and aptitudes. Agricultural schools would, therefore, fit in more naturally with the rural environment but they should be integrated into the pattern of rural multipurpose schools. There should be no room for the complaint that in the implementation of these reforms, due note has not been taken of the needs of rural areas and that, in the planning of education they are in any way handicapped in comparison with urban areas. One of the most useful methods of enriching rural life is to locate educational institutions in rural areas. This may well help to create a better social and cultural atmosphere in the villages and indirectly lead to improvements in such civic amenities as housing, water supply and communications.

II

TECHNICAL EDUCATION

Importance of Technical Education

It is generally believed that the physical resources that are available in the country in coal, iron, manganese, gold and many other varieties of mineral wealth will help in the making of a highly prosperous State. But it is forgotten that the presence of rich mineral resources will by itself not make a State prospereous, nor will the absence of the resources necessarily mean the poverty of a State. Thus for instance though countries like Japan, Switzerland, Holland and others possess little or no physical resources of this kind, the prosperity achieved by these nations has been spectacular, more so in recent years. The greatest wealth of a country is not to be found in the bowels of the earth but in the ingenuity and skill of the people. The United States of America is noted for being the richest country in the world today, but her present position

is not solely due to her natural resources but to the techniques that have been evolved and the 'know-how' methods that have been adopted through the education imparted to the citizens. The thousands of patents that are registered there every year as against a few hundreds in our own country, brings home to us the necessity for developing Technical Education in all grades.

One of the chief objectives of education is to make the individual conscious of his intellectual powers and manual skill which he may use for the good of his community. It is futile to think of the development of industry and of the possibility of competing on an equal level with highly industrialised countries in the West, or of infusing into industry a new quality which will contribute to greater efficiency, unless the personnel employed in such industry have had the necessary training and equipment to discharge their duties with skill and efficiency. From the point of view of the individual, real education consists in planning, executing and finally achieving something of which he can feel satisfied. It is *'in doing'* that ingenuity develops. Herein lies the importance of Technical Education in so far as it is a method of Education which will conduce to an all-round development of head and hand and will ultimately give young pupils the joy of having achieved something by their own initiative and labour.

Essential Characteristics of Technical Education

It is worth remembering that some form of Technical Education was prevalent from the earliest time. The young boy had to cut wood, weave cloth, repair the hut, help on the farm and perform similar duties, learning the trade from his father or from a master-craftsman, long before any formal schooling came on the scene. Technical Education is, therefore, a most natural form of education which every boy and girl can take to, in some degree or other. It enables a boy to gauge his abilities and aptitudes which may eventually help him to select a vocation. Even if he does not wish to follow a technical career, the use of the tools which he learns will give him great satisfaction through self-expression and also enable him to follow a worthwhile hobby in later life. He will appreciate good design and workmanship ; he will respect good habits of work and will appreciate all those who work with their hands and are able to achieve artistic designs. As a workshop product passes through many hands, he will learn the art of co operation so essential for success in industry as in all team games. The workshop is undoubtedly a character-building institution. One cannot possibly hide a bad job because it can always be measured by gauge or foot rule and therefore it develops love for honest worksmanship in the craftsman and cultivates in him a desire for efficiency so that a given job may be done in the proper manner in a given time.

We have referred to these aspects of Technical Education because we believe that it is fundamental that every boy should develop the natural tendency to use his hands on a job and cultivate some degree of manual dexterity whatever may be his future. It is for this reason that we have emphasised elsewhere the necessity for introducing a craft as a subject in all grades of education. It enables him to realise by experience, his fitness to take to one or other of the type of education according to his aptitude and skill.

Technical Education in relation to Compulsory Education

There is another aspect of the question that arises as it has arisen in other countries. The constitution has laid down that every boy and girl should receive free and compulsory education up to the age of 14. When such mass education is contemplated, it is obvious that several openings in the educational field must be provided so that each pupil may select according to his aptitude, ability and skill, those lines of educational activity most suited to him. The result otherwise would be to afford to the youth of the country a type of education as futile from his point of view as economically wasteful from the point of view of the State.

Relation of Technical Education to Industry

The immediate purpose of education in relation to Industry is to secure to Industry the services of better qualified men, an achievement which by itself does not at once result in more employment. The improvement in the content and method of education will make for increasing efficiency in industry and contribute to its expansion. It will also generate new ideas and create new activities in the sphere of business. This will lead to the development of industry which in turn will make for profitable employment becoming available to increasing numbers. Such considerations may obviate the criticism that in spite of the diversion of a large number of students at this stage to vocational education and more particularly to technical education, the problem of unemployment has not been solved forthwith. It should, however, be pointed out that, with the growing development of industry and its expansion and the keen desire of the public to utilise the natural resources of the country to the best advantage, the demand for well-trained technical personnel will increase rapidly and continuously for years to come.

The Hunter Commission on Technical Education

As far back as 1882, the Hunter commission stressed the need for diversified courses of study and recommended it strongly to the Government of the day. The report stated, "The Commission was asked the question, 'Is the attention of teachers and pupils in Secondary schools unduly directed to the Entrance Examination of the University ?' It was stated in reply that the attention of students is too exclusively directed

to University studies, and that no opportunity is offered for the development of what corresponds to the modern side of schools in Europe. It is believed that there is a real need in India for some corresponding course which will fit boys for industrial or commercial pursuits at the age when they commonly matriculate, more directly that is effected by the present system. The University looks upon the Entrance Examination, not as a test of fitness for the duties of daily life, but rather as a means of ascertaining whether the candidate has acquired that amount of general information and that degree of mental discipline which will enable him to profit by a course of liberal or professional instruction. In these circumstances, it appears to be the unquestionable duty of the Department of the State which has undertaken the control of education, to recognise the present demand for educated labour in all branches of commercial and industrial activity and to meet it is so far as may be possible with the means at its disposal."

Causes for Slow Progress of Technical Education

The position in 1953 is not very different from what the Commission stated in 1882. Very little advance has been made along the lines suggested by this and successive Commissions. This is due to several factors:

(*a*) Until recently the question of Technical Education was not seriously tackled by the Centre or State in a comprehensive manner.

(*b*) There was no attempt to organise the training of teachers for Technical subjects of study *i. e.*, those who combined in themselves general knowledge of a sufficiently high standard and the technical and applied scientific knowledge in the branch of technical studies.

(*c*) The Department of Public Education in almost all States has not had the advantage of expert guidance through a Technical Adviser of sufficient standing to enable it to plan these courses on an intelligent and comprehensive basis.

(*d*) There has not been sufficient coordination and cooperation between the different departments of Government. Some institutions were under the Director of Industries, others were under the Director of Labour and the rest under the Director of Education.

(*e*) Most excellent schemes came to grief on the rock of finance. It is of little use envisaging any type of Technical Education unless the minimum amount of efficiency can be ensured both at the initial stages and in later periods of training. It is costly to equip schools for most kinds of technical training; it is more costly to get properly trained personnel to run these schools.

In view of these handicaps, it is necessary to state while the aim should be to spread widely the facilities for technical training in diverse fields, the immediate objective should be to see that a few schools

at least are run on proper lines in each State with properly qualified staff and with adequate equipment. In this respect the cooperation of the Centre with States will be necessary to run such model schools on the pattern of the multipurpose school or with a limited role ; in particular it is necessary to train the teaching staff needed for such technical schools. Coordination and cooperation between certain departments has been envisaged, and this will be referred to in greater detail elsewhere, but in the field of Technical education there is no reason why the schemes now in vogue, *viz.*, the training institutes establish for ex-service personnel and the schools run as polytechnics should not be utilised for different types of technical training. So far as training in Agriculture and Animal Husbandry is concerned, we have referred to this in another chapter. The personnel required at the higher levels in the Department of Public Education will also be dealt with later.

Types of Technical Education

Technical education has to cater for four distinct types of students :-

(1) The students of Higher Secondary Schools in the four upper classes.

(2) Students who are unfit to persue the full course of Secondary education or who leave school for economic reasons and find it necessary to earn a living as early as possible.

(3) Those who pass the Secondary school course and who desire to pursue Technical education in polytechnics or occupational institutes without going to a university.

(4) Those belonging to any of the above categories who after completion of their course are gainfully employed and who wish to improve their prospects by part-time evening classes in subjects of their choice.

The first category of students can be provided for in a Technical High school or Multipurpose school, which is not different from the ordinary Secondary school except that besides giving training in core subjects like languages, science, mathematics and some degree of social studies, it will provide for (1) Applied Mathematics and Geometrical Drawing, (2) Elements of Workshop Technology, and (3) Elements of Mechnical and Electrical Engineering. The objective of the school is to give an all-round training in the use of tools, materials and processes which are mainly responsible for turning the wheels of civilization. The school is not intended to produce artisans. In order to attract the right type of students selection is to be made on the same basis as for the secondary school and the examinations are to be held at the end of the school course on the same lines on which Secondary School Leaving Certificate Examinations are held.

The second category of students is provided for in School of Industry or a Trade School teaching a number of trade courses in Mechanical Engineering, Electrical Engineering and other subjects. The duration of these courses is usually two years and a certificate is given at the end of the course.

The third category of students is provided for in Technical Institutes and sometimes in Engineering Colleges. The courses are usually of three years and lead to a Diploma.

The fourth category of students which is numerically the biggest is at present almost wholly uncatered for.

If every student knew that he could get any type of Technical education on a part-time basis, he would not care to rush to a University. He could be gainfully employed during the day and he could take part-time classes in technical subjects of his choice either in the morning or evening. He would be earning while learning. At present there is a woeful dearth of facilities for part-time education in technical courses. The deficiency must be removed as early as possible.

Under the present condition and in view of the paucity of fully trained technical personnel, it may be necessary to utilise large central institutes in some of the bigger cities for a multiplicity of purposes. They can serve for the training of the students in the Technical High schools and Technical Institutes. It is also possible to utilise such a Central Institute for training students who follow diversified courses of study in Secondary and Higher Secondary schools; the academic subjects would be taught in the respective schools and the technical subjects at the Central Institute depending upon the facilities there. Two or three schools conveniently situated in the neighbouring area may thus avail themselves of such facilities by arranging for the transport of students from the school and for an integrated programme of work as between the schools and the Central Institute. As Multipurpose schools develop and better facilities become available, it should be the endeavour of the managements concerned to see that the schools are fully equipped to meet the needs of all diversified courses so that these students may have more time to equip themselves thoroughly in the practical aspects of Technical education. Such a Central Institute, provided it has the necessary facilities, may be utilised for part-time training in industrial courses, and for further training of those who have already had some training.

Training of Craftsmen for Industry

Another type of training which is exceedingly important to produce the right sort of craftsmen in industry is the training that can be given to apprentices in industrial concerns. It has not been sufficiently realised that the most important place for the training of a craftsman is industry

itself, and the function of the technical school is generally to afford the boys general and Technical education as a complement to apprentice training. The integration of apprenticeship training in a factory and general and technical education in a school should be an essential structure of vocational and occupational training.

This integrated system represents a desirable aspect of development as far as technical and vocational education at the secondary school level is concerned. To secure this objective, two complementary measures are called for. Firstly, a well-conceived and well-organised system of apprenticeship training in various trades for the age group above 14 should be the normal feature of all industrial concerns. Secondly, Technical schools functioning at the same level as the normal Secondary schools should be established for the benefit of the boy-apprentices. Such schools should provide the apprentice with the required amount of Technical education in the special trades as well as General education on a part-time basis. For this purpose, the schools should be located in close proximity to industries and should function in close cooperation with the industry concerned. The entire period of apprenticeship-cum-technical school education may range from four to five years, depending upon the period of apprenticeship training required in a particular craft or trade. A boy at the age of 18 or 19 would thus have received both a General education and a Technical education which would fit him for some gainful employment. It will be seen that this type of school is different from the Trade school and the Higher secondary School that has been envisaged, in that the whole purpose of the school is to enable the boy to carry on his apprenticeship training within industry and supplement it by the training given in the school. If all the measures suggested above are implemented in course of time, there will be no occasion for the student to rush to the type of education provided in the University.

Apprenticeship Training

It is one of the accepted principles of sound industrial organization that no one who has not had proper training is allowed to handle machines or work on them. Apprenticeship is one of the oldest among the time-honoured methods of education and is still the accepted method of "In-work" training. To be able properly to use a machine, the learner must be trained by an expert worker. This method of practical training is the most important part of the training of technicians in all grades. This work has been well recognised by industry. In many countries, apprenticeship training is, by legislation, made obligatory in all industrial concerns both for employers and employees. In some countries legislation directs employers to release apprentices for a full day in a week or two half days in a week for theoretical instruction in a technical institute. In other countries, the trainees in technical institutes have of necessity to put in a period of apprenticeship in organised industry, and to enable

them to do so, legislation has been passed making it obligatory for the industry concerned to receive such apprentices and to see to their practical training in an organised manner and through selected personnel of the industry concerned. It must not be felt by the industry that the training of these apprentices is a burden or is an unnecessary imposition upon them. The more far-seeing of industrialists have realised that the growth and development of the industry concerned and its increased efficiency will result from the proper training of apprentices.

The whole task of occupational training would be greatly facilitated if a certain number of Secondary school pupils, particularly from Technical High schools, were taken directly as apprentices into industry. It would enable the student to utilise his technical workshop knowledge and to develop his abilities at a time when his flexibility and capacity for learning are at their highest. If on completion of his training he is promised a job it would give inspiration to Technical education in the school by creating an objective towards which a large number of students would work.

We therefore recommend that suitable legislation should be passed so that apprenticeship in industrial concerns may be part of the responsibility of industry and that every industry should take a certain number of apprentices for training. At the same time, we feel that the best results will be obtained only by securing the whole-hearted cooperation of industry, trade and commerce. During the course of the tour, we met respresentatives of Chambers of Commerce and Industry and Trade, and we were gratified to note that several of them expressed their agreement with these views. We recommend that in the planning of Technical education and Technological education at all levels, representatives of commerce and industry should be closely associated with representatives of education so that in the planning and direction and in the maintenance of standards their views will be effectively expressed.

We were also glad to note that trade, industry and commerce would not be unwilling to contribute towards such Vocational education provided the funds were directly utilised for the starting and development of such institutions. We recommend that a small cess called 'industrial education cess' should be levied and that the proceeds of this cess should be utilised for the furtherance of Technical education. We greatly appreciate the response to this suggestion from a number of witnesses, respresentatives of Chambers of Commerce and Industries. We shall deal with this aspect of the question when we deal with finance in regard to Secondary education.

Prevention of Wasteful Expenditure

We have dealt with several aspects of Technical education. We realise that Technical education is an excellent venture and at first sight it would appear that the amount that is to be spent on the establishment

of these Technical schools will be a heavy burden on the States and the Centre. We have suggested ways and means of meeting some of the cost of Technical education. But we should like to state, however, that Technical education, if conducted on right lines will ultimately go a long way to lessen the expenditure incurred by industry and by the State and the people. To quote an example given by an expert as to how this can be achieved, in one State the total capital invested on motor cars and trucks alone is of the order of Rs. 100 crores. If these vehicles are carefully used and repaired in time they would last for at least ten years. Owing, however, to the lack of proper care the life of the car is reduced to not more than seven to eight years. If the life of a car is calculated to last for ten years the capital assets on these vehicles would have been wasted in ten years, *i.e.*, a tenth of the original investment *viz.*, Rs. 10 crores every year. Because of lack of due care by properly trained personnel whether as drivers or as mechanics the capital assets of the State are wasted in eight years. In other words, the amount invested is completely spent in eight years so shat if Rs. 100 crores is the total, the amount to be written-off every year would be Rs. 12½ crores instead of Rs. 10 crores. With an efficient organization, the loss of Rs. 2½ crores could have been saved. A very small amount of this, spent on Technical education would make a material difference and enable the industry and the user of cars to make a substantial saving. What has been stated about the motor car industry is equally applicable to machinery in textiles, mills, railways, power plants, factories etc. At every stage of our industrial development we are wasting our assets faster owing to lack of technically trained personnel. If only 1/10th of this is invested in technical education as recommended, it would lead to the training of technical personnel and the saving of 10 times the amount now spent in importing machinery and machinery parts alone every year.

All-India Council for Technical Education.

An All-India Council for Technical Education has been set up by the Government of India to deal with Technical education. At present its functions are confined to the education above the High school stage. The implementation of the recommendations of the Central Advisory Board of Education, as embodied in its report on "Post-war Educational Development" has been undertaken by the States independently in so far as the organisation of Technical High schools and junior Technical schools is concerned. This has resulted in the setting up of schools of different types ; some of them not even conforming to the pattern recommended by the Central Advisory Board. In the interest of uniformity of the general pattern of institutions at the Secondary stage, we recommend that the All-India Council for Technical Education and the bodies already functioning under it be utilised for working out the outlines of the courses.

The All-India Council for Technical Education has at present six Boards of Technical Studies under it in the following subjects :

(i) Engineering and Metallurgy.

(ii) Chemical Engineering and Chemical Technology.

(iii) Textile Technology.

(iv) Architecture and Regional Planning.

(v) Applied Art.

(vi) Commerce and Business Administration.

These Boards have framed schemes of courses and examinations in various subjects—

(a) at a level corresponding to degree of Universities, and

(b) for training of supervisory personnel, such as chargemen foremen, etc., both on a full-time as well as on a part-time basis.

Integration of these courses with the general curriculum at the Secondary level will be a great advantage. Ordinarily, one would expect, that the students, on completion of their Secondary courses with the optional group for Engineering and Technology, would either take the full-time courses in Higher Technical institutions or join the industry as apprentices, during which they would take advantage of the facilities provided by the part-time courses in conjunction with their practical training. In either case, the integration as referred to above will be useful.

The present constitution of the Boards of Technical Studies provides for representation of—

(a) Association of Principles of Technical Institutions ;

(b) Inter-University Board ;

(c) Professional Bodies concerned ;

(d) Trade, Commerce and Industry ; and

(e) the institutions affiliated to the Council for the purpose of preparing students for the Council's awards.

In addition, there is provision for four nominees of the Coordinating Committee of the All-India Council and three members coopted by the Board itself. In order to give representation to persons engaged in Secondary education, we recommend that either through the nominations by the Coordinating Committee or by cooption or by suitably amending the constitution of the Boards some places be reserved for them. That is a matter of detail, which could be gone into if the principle is approved. The Boards of Technical Studies of the Council may be called upon to advise on the content of the courses at the Secondary level generally in so far as the technical subjects are concerned.

With the introduction of diversified courses at the secondary stage and a larger provision of Junior Technical institutions, the latter working in collaboration with the industry, it will be increasingly necessary to secure from the industry facilities for practical training at all levels. Apprenticeship schemes would require to be worked out for students leaving the High Schools as also for students completing the Senior Basic Stage. In bringing about a closer cooperation between the industry on the one hand and the institutions and the State Governments on the other, the Regional Committees of the Council can play a useful part. We understand that two such Committees have already been set up and two more will come into being very soon. There will then be one Committee for each of the regions. *viz.*, the East, West, South and North. These Committees have on them representatives of the State Governments situated within the respective region, representatives of Industry, Commerce and Labour, representatives of Universities, representatives of Technical Institutions and the Institute of Engineers (India) besides co-opted members and representatives of the Central Ministries of Education, Railways and Labour. Such a representative body would in our opinion be very useful in establishing the necessary contacts and working out the apprenticeship training programme.

The proposals made above will also have the advantage that one single body will be laying down the policies in regard to technical education *at all levels.*

III

OTHER TYPES OF SCHOOLS

Besides the High and Higher Secondary schools and the various kinds of Tecnnical institutions already discussed in this chapter, there are other types of school which the Commission will have to take note of since they provide education for the age group of 11 to 17. These are Public schools, Residential schools, "Residential Day schools," Schools for the handicapped etc.

Public Schools

In India, the majority of the Public schools are of comparatively recent origin and have been modelled more or less on the Public school system in England. At present there are 14 such schools recognised by the Public School Conference. There are also a number of other educational institutions which are run more or less on the lines of the Public schools.

The need for such Public schools has been a matter of some difference of opinion amongst those whom we interviewed and extreme views have been expressed on this subject. It has been stated that a Public school in a modern democracy is an anachronism, that it has not

made any material contribution to the educational progress of the country and according to some has tended to produce a type of narrow-minded snob or one who will be ill-fitted to take his proper place in a democratic society. The criticism was also made that as these schools are expensive they will serve only the rich and thus prepetuate a class feeling not suited to the new democratic set-up of the country. A different view, however, has been presented by others who have had experience of the students educated in these schools. Sir John Sargent, formerly Educational Adviser to the Government of India, speaking about them states that 'the product of the public school may be limited in its intellectual range, narrow in its sympathies and arrogant in its assumptions, but at the same time it displays a capacity to set up, and abide by, standards of conduct and a readiness to accept responsibility, qualities which must form an essential part of the equipment of any real public servant."

After carefully considering the matter, we have come to the conclusion that if Public schools are properly organised and training is given on right lines, they can help to develop correct attitudes and behaviour and enable their students to become useful citizens. There are greater opportunities in these schools than in the majority of Secondary schools for developing certain essential traits of character—including the qualities of leadership, because of the special facilities that they can offer and the close contact between teachers and pupils that is possible in them. This does not mean, however, that the Public school is the only or even the main institution to inculcate qualities of leadership but till the other schools are in a position to provide similar facilities, it would be unwise to reject their special contribution in this direction.

During the last World War, it was clearly demonstrated that the leaders for the armed forces were found from amongst candidates trained in a variety of schools. What is necessary, therefore, is that some of the good principles and methods followed in Public schools should be gradually encouraged in all schools. This will, however, take time, and for the present, therefore, Public schools have a limited but dafinite place in our educational system.

It is, however, essential that certain definite principles should be borne in mind in the working of the Public schools.

(1) The Public school should not be a special or exclusive institution. It must have its roots in the soil of the country and must generally conform to the normal pattern of national education.

(2) Public schools should place due stress not only on the spirit of sportsmanship but also on all other important aspects of citizenship, the dignity of labour and a social sense. They should also take care to see that their general educational life is in conformity with Indian culture, traditions and outlook.

So far as the financing of these schools is concerned, we are of opinion that Public schools should depend less and less on grants made by the Centre or the State concerned, and should become self-supporting as soon as possible. We believe that, in principle, in so far as they are expensive schools, largely meant for the richer classes, they have no claim to receive State aid and the Government grants that are at present given to them should be steadily reduced. Some schools, like the Doon School, are at present actually self-supporting, while others are so placed that if State aid is suddenly withdrawn they will have to be closed down. We, therefore, feel that for the transitional period of about five years, State or Central assistance should be given to them on a gradually diminishing scale, till at the end of that period they will either become self-supporting or will close down, if adequate public support is not forthcoming. But the State or the Centre may provide for certain free studentships for Public schools to be given on the basis of selection, the amount of such free scholarships being based on the average of expenditure to be ordinarily incurred by the students.

Residential Schools

Residential schools have a definate place in any scheme of Secondry education. It is true that the best education upto the age of adolescence can be provided in an environment in which the home, the school and the local community all play their respective parts. Unfortunately, however, not all homes and parents are in a position to offer an educative environment for their children. There are occasions on the contrary when the education of the home suffers because of the parents' transfer from one place to another or their frequent absence from home. It then becomes necessary for them to have recourse to residential schools, Moreover, in view of the adoption of regional languages as media, it will become more and more difficult for some parents to keep their children with them during the whole school course. Members of the defence services and employees in foreign embassies would also find it difficult to give their children any education unless there are residential schools in which they could be admitted. Further. when many High schools and Higher Secondary schools with diversified courses are started in rural areas—as we have recommended—the need for residential accommodation would be increasingly felt. In fact the rural pupils will be seriously handicapped unless residential accommodation is provided for them. In addition the residential schools can offer a type of education where the pupil can be better trained in social behaviour, community life and sociai service and can take part more fully in extra-curricular activities than in a Day-School. This would, however, require that in residential schools some of the teachers should be in residence so that there may be large opportunities of contact between them and their students. This will compensate to some extent for the lack of home surroundings and home influence.

Residential Day Schools

This is a type of school—not common in our country so far—where the pupils can come early in the morning and stay till late in the evening *i.e.* between 8 a m. and 6 p.m. The advantage of this Residential Day School, as it may be called, is that many of the childern will be able to utilise the facilities of the school for the greater part of the day. Such facilities will include the full use of the playgrounds and the library opportunities for supervised study and extra-curricular activities. As in the case of the residential schools, there will be greater teacher-pupil contact which is so necessary for the education of character. In such schools, it is necessary to provide a mid-day meal and possibly some light refreshment in the afternoon. Financial considerations may make their free supply impossible, but we believe that, if a co operative system of Cafeterias is established in such schools and if interest is taken by the Staff and Parents' Associations, it will be possible for most of the boys and girls to take advantage of these facilities. It will also be neccessary to provide some place where the pupils could take rest in the middle of the day. During part of the year, such rest would be taken in the open, in the school playground and for this purpose, it would be useful and aesthetic to plant shade trees in the compound.

Such day schools would be specially useful in areas with a large industrial population, where the poorer classes usually dwell and the sanitation is poor and there is little or no accommodation for childern's work and play.

Schools for the Handicapped

The need for special types of schools for pupils who are handicapped in various ways has been recognised in all countries In some of the advanced countries a regular system of special schools has been established for mentally and physically handicapped children. In all communities, there are unfortunately many children who definitely suffer from serious mental deficiency, which in some cases develops into abnormal propensities. There should be a few schools in each State for such children where methods specially suited to their need may be adopted. This is also necessary in the interst of the smooth progress of normal children.

Schools for the Blind, the Deaf and the Dumb, etc.

Unfortunately India has a large number of blind, deaf and mutes. There are at present only a few institutions for such children. We have seen some of them and we were glad to find that excellent instruction was being imparted to the blind and they were being trained for useful avocations such as weaving. spinning, basket-making, rattan-work, woodwork, music, etc. We also note with pleasure that the Government of India has taken special steps to evolve a common Braillie code for use in

all schools for the blind. These schools must of necessity be residential where the pupil can be kept for a number of years till they are fit to take up some useful occupation. The number of such schools needs to be considerably increased, if they are to cater to this unfortunate class of handicapped children.

Besides these schools there are special schools in some States where children suffering from serious diseases like tuberculosis or from grave physical deformity are housed and educated in the open air. In many western countries, such children are accommodated in special open-air-schools where side by side with medical treatment, a suitable type of education is provided for them. We recommend that such institutions should be started in a few centres for children suffering from such diseases.

Continuation Classes

Although the Constitution has provided that all children upto the age of 14 should receive full-time education, it seems to us that under the existing conditions it may not be possible to achieve this objective for many years to come. A large majority of the children will leave school at about the age of 11 after completing their Primary education and while some of them may go to trade schools, the bulk of them will not have any opportunities for further study. Yet the age period 11 to 14 is a crucial period when it is necessary that the children should be in an educative atmosphere. We, therefore, recommend that, as an interim measure, some system of part-time continued education should be made available. Such education may be given to these pupils free in the Middle and High schools after the usual school hours until the children attain the age of 14. The organization of such Continuation Classes may be done by school authorities, other private individuals and societies. Special courses should be evolved to meet the needs of these part-time classes.

IV

SOME SPECIAL PROBLEMS OF WOMEN'S EDUCATION

It will be noticed in this report that no particular Chapter has been devoted to the education of women. The Commission feels that, at the present stage of our social evolution, there is no special justification to deal with women's education separately. Every type of education open to men should also be open to women. During the course of our visits to various institutions and Universities we have noted that women have found admission to practically all the faculties which a generation ago would have been considered as unsuitable for them or beyond their easy reach. It is a matter of gratification that many women have joined

the Faculties of Engineering, Agriculture, Medicine, Veterinary Science, Commerce, Law and Teaching as well as the Arts and Science and have taken to research and some have made their mark in it.

Our attention has been drawn to the provision in the Constitution that while special arrangements may be made for women and children, there shall not be any discrimination against any citizen on the ground only of religion, race, caste, sex or place of birth. It is also laid down under section 16(a) that there shall be equality of opportunity to all citizens in matters relating to employment or appointment to any office under the State and no citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence be ineligible for, or discriminated against, in respect of any employment or office under the State. Under the circumstances it will be sufficient if we draw attention to a few points of special consideration in connection with the facilities provided for girls within the general educational framework.

Several delegations on behalf of Women's Organizations discussed with us various aspects of Women's education. It was stated by them that there are two divergent views with regard to women's education. One view is that the only proper place for a woman is the home and that the education of girls will, therefore, have to be considerably different from that of boys. Such persons may admit with reluctance that in these hard times, some women have to earn their living, but in their heart of hearts, they deplore this fact and consider that training for any profession should be regarded as of minor importance in comparison to the training for home making. The other view is that education should seriously concern itself with the place that women occupy in public life. They point out that India greatly needs the services of women outside the four walls of their homes and that its backwardness in the last century was due in no small degree to the low place in society accorded to women. They insist that women must be given exactly the same education as men, so that they may compete with them on equal terms, at school and college as well as in the various professions and services.

There was general agreement, however, that for girls—as well as for boys—education needs to be more closely connected with the home and the community. It should be less bookish in the narrow sense of the word and more practical and should explore the possibility of training the mind through the hands. It should do much more to prepare them for the part they will have to play later as parents and as citizens, *i.e.*, the claims of family life should be considered as important as those of public life. For this reason, it was urged that the teaching of Home Science in Girls' Schools (and wherever possible, for girls attending boys' schools) should be radically improved not necessarily with the idea that women's place is restricted to the home, but because it is essential that she should be educated to fulfil her two-fold duty to family and society.

If greater attention is given to Home Science, with special emphasis on practical work of everyday needs and problems, it wil' help to bridge the gulf between the school and the life of the home and the community, and be a better preparation for a girl's life after school, in which home making will necessarily play an important part. An educated girl who cannot run her home smoothly and efficiently, within her resources can make no worthwhile contribution to the happiness and the well-being of her family or to raising the social standards in her country.

Co-education

Another issue that was raised in our discussion was that of co-education, which implies the education of boys and girls on a footing of equality in the same institution. So far as the Primary and the University stages are concerned, co-education was generally favoured, but in regard to education at the secondary stage there was considerable divergence of opinion. Many maintained that, during the period of adolesence it is desirable that the education of boys and girls should be carried on in separate institutions. On the other hand, it was stated that, in view of the financial considerations and other difficulties in regard to proper personnel etc., this would mean that many girls will not be able to attend schools at all. With the comparatively limited finances that are available for education and wish so many other commitments in regard to the expansion and improvement of education, there was some apprehension that, if separate schools were insisted upon, the Secondary education of girls in many parts of the country would be handicapped. Under the present circumstances, there are considerable variations in regard to the social intercourse of the sexes in different parts of the country. Naturally, in orthodox regions co-education cannot be popular or successful as the atmosphere in the school will be very different from that in the family and the community.

It seems to us, therefore, that there can be no hard and fast policy with regard to co-education and that in this respect the pattern of education in our schools cannot be very much in advance of the social pattern of the community where the school is located. We are, of opinion that where it is possible separate schools for girls should be established as they are likely to offer better opportunities than in mixed schools to develop their physical, social and mental aptitudes and all states should open such schools in adequate numbers. But it should be open to girls whose parents have no objection in this matter, to avail themselves of co-educational facilities in boys' schools.

We have noticed with regret that, because of the larger expenditure which has to be incurred on buildings, equipment and staff in the case of girls' schools, States have generally responded more readily to the demand for boys' education than to the demand for the education of girls.

To promote the pattern of society that we envisage for the future, the expansion of girls' education must take place *pari passu* with boys' education. In a democratic society, where all citizens—men and women—have to discharge their civic and social obligations, we cannot envisage differences which may lead to variations in the standard of intellectual development achieved by boys and girls.

Conditions for Mixed Schools

This brings us to a consideration of the special facilities that should be provided for girls in mixed schools. We feel that in all such institutions definite rules should be laid down in order to provide for the special needs of girls. In the first place, the staff must be composed of both men and women. Secondly, provision should be made for the teaching of subjects like Home Graft. Music, Drawing, Printing, etc., which specially appeal to girls. Thirdly, necessary amenities should be provided for girls by way of separate sanitary conveniences, retiring rooms, playing fields etc. Even in those institutions where a comparatively small number of girls is admitted—and this will particularly be the case in rural areas for a long time—there should be at least one woman teacher on the staff to attend to their needs and to advise them on all social and personal matters. We need hardly stress the fact that women teachers themselves should have necessary special facilities in the way of retiring room and sanitary conveniences.

In co-educational as well as mixed schools there should be provision for special co-curricular activities suited to girls, in addition to those activities in which they participate side by side with the boys—*e.g.*, Girls Guiding, Home Nursing. Needle work etc.

It is also desirable that on the management of such schools there should be women representatives who will be able to see that the necessary facilities for girls are actually provided by the management.

SUMMARY OF RECOMMENDATIONS

New Organisational Pattern—

1. Under the new organisational structure, education should commence after four or five years' period of Primary or Junior Basic education and should include (*a*) the Middle or Senior Basic or Junior Secondary stage of three years, and (*b*) the Higher Secondary stage of four years.

2. During the transitional stage, the existing High schools and the Higher secondary schools should function on the lines laid down.

3. The present Intermediate stage should be replaced by the Higher Secondary stage which should be of four years' duration, one-year of the present Intermediate being included in it.

4. As a consequence of the preceding recommendations the first degree course in the University should be of three years' duration.

5. For those who pass out of the High school there should be provision for a pre-University course of one year, during which period the scheme of studies should be planned with due regard to the needs of the degree or the professional course to be taken by the students and special emphasis should be placed on the quickening of intellectual interests, training in method of study at college and the study of English so long as it continues to be the medium of instruction at the University.

6. Admission to professional colleges should be open to those who have completed the Higher Secondary course, or have taken the one year's pre-University course.

7. In the professional colleges, a pre-professional course of one year should be provided for the students, preferably in the professional colleges themselves, but, as a transitory measure, they may be taken in the degree colleges where facilities exist, till professional colleges are able to provide for such courses.

8. Multi-purpose schools should be established wherever possible to provide varied courses of interest to students with diverse aims, aptitudes and abilities.

9. Those who have successfully completed such courses should be given opportunities to take up higher specialised courses in polytechnics or technological institutions.

10. All States should provide special facilities for agricultural education in rural schools and such courses should include Horticulture, Animal Husbandry and Cottage Industry.

Technical Education—

11. Technical schools should be started in large numbers either separately or as part of multi-purpose schools.

12. Central Technical Institutes should be established in larger cities which may cater to the needs of several local schools.

13. Wherever possible technical schools should be located in close proximity to appropriate industries and they should function in close cooperation with the industry concerned

14. Apprenticeship training being an important part of the training needed, suitable legislation should be passed making it obligatory for the industry to afford facilities to students for practical training.

15. In the planning of Technical and Technolgical education at all levels, representatives of Commerce and Industry should be closely associated with the educationists so that in the planning and direction of

such education and in the maintenance of standards their views may be given effective weight.

16. A small cess to be called the "Industrial Education Cess" should be levied on industries and the proceeds of the cess should be used for the furtherance of Technical education.

17. In the interests of evolving a suitable pattern of technical courses at the secondary stage, the All-India Council for Technical Education and the bodies functioning under it should be utilised for working out details of the courses.

Other Types of Schools—

18. Public schools should continue to exist for the present and the pattern of education given in them should be brought into reasonable conformity to the general pattern of national education. Such schools should gradually become self-supporting, but during the transitional period of the next five years, State or Central assistance should be given to them on a gradually diminishing scale.

19. The States or the Centre should provide for certain free studentships in them to be given on the basis of merit to selected students.

20. A number of residential schools should be established more particularly in certain rural areas, to provide proper opportunities for the education of children and particularly to meet the needs of children whose education suffers at present owing to the exigencies of service of their parents.

21. "Residential Day Schools" should be established in suitable centres to provide greater opportunities for teacher-pupil contact and for developing recreational and extra-curricular activities.

22. A larger number of schools should be established to meet the needs of handicapped children.

Co-Education—

23. While no distinction need be made between education imparted to boys and girls, special facilities for the study of home science should be made available in all girls' schools and in co-educational or mixed schools.

24. Efforts should be made by State Governments to open separate schools for girls wherever there is demand for them.

25. Definite conditions should be laid down in regard to co-educational or mixed schools to satisfy the special needs of girl students and women members of the teaching staff.

CHAPTER V

STUDY OF LANGUAGES

The Secondary Education Commission was greatly impressed with the amount of interest envinced in all States in the study of language at the school stage. No subject attracted greater attention and we found not infrequently that strong opinions were expressed on the so-called language controversy. In the memoranda that were presented to us and in the discussion that we had with witnesses in different parts of the States, certain fundamental considerations were urged upon us. In view of the development of regional languages in the different parts of the country and the languages spoken in such areas, it may not be practicable or desirable to attempt to lay down a uniform policy for the whole country. On the contrary some witnesses were strongly of the opinion that there should be some uniformity in regard to the study of the languages and that there was need for a definite policy to be laid down on an all-India basis. It was claimed by some that there should be one language which will be known throughout the length and breadth of the country and that Hindi which is prescribed as the official language at the Centre should be studied compulsorily.

Groups of Languages

We realise that there are five distinct groups of languages which have to be taken into consideration :—(1) The mother tongue ; (2) the Regional language when it is not the mother-tongue ; (3) the Official language of the Centre, more commonly called the Federal Language ; (4) the classical languages, Sanskrit, Arabic, Persian, Latin, etc., and (5) English which has come to be recognizsed as an International Language. In those areas where the mother-tongue and the regional language are the same, the number of languages to be taken into consideration will be limited to four and in those areas where the regional language, the mother-tongue and the language of the Union are the same, the number of languages to be taken into consideration will be limited to three. So far as the Federal language or the official language of the Centre is concerned we feel that the areas in the different parts of the country may be divided into three regional groups : (1) regions where Hindi is the mother-tongue, and therefore, is the regional language as well as the language of the Centre ; (2) regions where although it is not the mother-tongue, Hindi is spoken by a large number of people of the region ; (3) regions where Hindi is neither mother-tongue nor the regional language nor spoken or understood by the vast majority of the people. These are generally spoken of as non-Hindi speaking area.

Language and the Constitution

In the course of our discussions, more than one witness referred to the provisions in the Constitution with regard to the languages. Some held the view that the Constitution has laid down that a particular language should be taught throughout India or that another language should be discarded from our schools in the course of 15 years. In view of such diverse opinions we have felt it desirable to state exactly what is provided in the Constitution about languages. The Constitution lays down "that the official language of the Union shall be Hindi and that for a period of 15 years from the commencement of the Constitution, English language shall continue to be used for all the official purposes of the Union for which it was being used immediately before such commencement." It also lays down that Parliament may by majority provide for the use after the said period of 15 years of the English language. Under Article 345 of the Constitution it is stated that "the Legislature of a State may by law adopt any one or more of the languages in use in the State or Hindi as the language or languages to be used for all or any of the official purposes of the State ; provided that until the legislature of the State otherwise provides by Law, the English language shall continue to be used for those official purposes within the State for which it was being used immediately before the commencement of this Constitution." It also lays down that "the language for the time being authorised for use in the Union for official purposes shall be the official language for communication between one State and another State and between a State and the Union ; provided that if two or more States agree that the Hindi language should be the official language for communication between such States, that language may be used for such communication. The President may, if he is satisfied that a substantial proportion of the population of a State desire for use of any language spoken by them to be recognised by that State, direct that such language shall also be officially recognised throughout that State or any part thereof for such purpose as he may specify." Under the special directives, it is stated that "it shall be the duty of the Union to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions used in Hindustani and in the other languages of India specified in the eighth schedule and by drawing whenever necessary or desirable, for its vocabulary, primarily on Sanskrit and secondarily on other languages."

We have quoted somewhat in extenso the provisions of the Constitution, as time and again we found that witnesses had diverse views on what was envisaged in the Constitution and the manner in which education should be developed. From a careful study of the provisions in the Constitution it may be inferred that two objectives were kept in view.

Firstly, that Hindi will eventually be used by the Union Government in all official correspondence with the States, and for communication between one State and another, or between a State and the Union. Secondly, Hindi should be developed so that it may serve as a medium of expression for all the elements of the composite culture of India.

Study of Hindi in the States

During the course of our investigation, we found that the States had taken different steps to make Hindi a subject of study at the school stage. Broadly speaking, steps taken are : (1) In some States Hindi is not merely a compulsory subject of study, but it is also made the medium of instruction and examination, throughout the school stage ; (2) Hindi is a compulsory subject of study at the school stage and it is a subject of examination, but the medium of instruction is the regional language ; (3) In others, Hindi is a compulsory subject as one of the languages to be studied, but although a test is provided, the result of the test is not taken into consideration for promotion ; (4) In a few States the provision for the teaching of Hindi is compulsory in all schools, but Hindi as a subject of study is optional so far as the pupils are concerned, and it is not regarded as a subject for examination. With regard to the last category, we were given to understand that although it was an optional subject 80 to 85 per cent of the pupils had voluntarily taken to the study of Hindi in these areas. It was also brought to our notice that in certain areas, the introduction of the study of Hindi as a compulsory subject had provoked opposition, and steps had to be taken to modify the rules framed thereunder. When, however, it was made optional, study of Hindi was taken by a large number of students.

Position of English in the Schools

A review of the present position of the study of English at the Secondary School stage in the different States may be of interest. In most States prior to 1937, English was not only a compulsory subject of study but also the medium of instruction in the Secondary schools ; the languages to be studied by the pupil were two, English and the mother-tongue or regional language or a classical language. Subsequently the medium of instruction was changed and at present in practically all States the medium of instruction is either the mother-tongue or the regional language. English is, however, a compulsory subject of study at the secondary stage in practically all the States. In this connection, it may be pointed out (i) that English is allowed to be the medium of instruction in school where the students admitted are largely those whose mother-tongue is English, (ii) in view of the difficulties experienced by a certain number of pupils who had to migrate from one part of the country to the other and who could not easily take to a new regional language, English was allowed to be continued in some schools as the medium of instruction and as a language of study.

The Position of Linguistic Minorities

The Central Advisory Board of Education considered in 1949 the case of pupils belonging to certain minority groups, whose mother-tongue was different from the regional language, and passed the followlng Resolution :—

> "That the medium of instruction in the Junior Basic stage must be the mother-tongue of the child and that where the mother-tongue was different from the Regional or State language, arrangements must be made for instruction in the mother-tongue by appointing at least one teacher to teach all the classes, provided there are at least 40 such pupils in a school. This Regional or State language where it is different from the mother tongue should be introduced not earlier than Class III, not later than the end of the Junior Basic stage. In order to facilitate the switch over to the Regional language as medium of instruction in the secondary stage, children should be given the option of answering questions in their mother-tongue for the first two years after the junior basic stage."

> "If, however, the number of pupils speaking a language other than the Regional or State language is sufficient to justify a separate school in any area, the medium of instruction in such a school may be the language of the pupils. Such arrangements would, in particular, be necessary in metropolitan cities or places where large population speaking different languages live or areas with a floating population of different languages. Suitable provision should be made by the provincial authorities for the recognition of such schools imparting education through a medium other than the Regional or State language."

We have received a communication from the Chairman of the Inter-State Board for Anglo-Indian Education, inviting attention of the Commission to certain special guarantees that have been given in Article 337 of the Constitution and also to the fundamental rights guaranteed under Article 30 of the Constitution. Section 30 states : "All minorities, whether based on religion or language, shall have the right to establish and administer educational institutions: of their choice." "The State shall not, in granting aid to educational institutions, discriminate against any educational institution on the ground that it is under the management of a minority, whether based on religion or language." These provisions being obligatory, we have no doubt that the Governments in the Centre and the States will adopt necessary steps to see to the fulfilment of such obligations as are laid upon them by the Constitution.

We have given in brief the present position in regard to the study of languages in the different States. So far as the medium of instruction is concerned in most of the schools in the States, the present position is that either the mother-tongue or the regional language has been adopted as the medium of instruction. Where minorities exist provision is made to give instruction in the mother-tongue, if the minimum number of pupils is available.

The Purpose of Language Study

The question has often been raised in the course of our discussions as to the number of languages that can be learnt by pupils in the Secondary schools and at what stages the study of these languages should be commenced. Some maintain that we should while considering this problem, take into account the purpose which is to be served by the study of each of these languages. We do not wish to dogmatise on such very important issues which should be treated on the academic plane and on the principles of pedagogy. But we agree that there should be a clear perspective of the study of each of these languages. It is ordinarily accepted that the mother-tongue is the most suitable language as a medium of a instruction for the child beginning its study. If the same advance had taken place in regional languages as has taken place in many foreign languages, mother-tongue or regional language would have been the medium of instruction at all stages of the educational ladder. As the regional language is likely to be the language used by the majority in the region it is desirable to acquire knowledge of this language. In view of the difficulties in particular regions to cater to the needs of very small groups and the paucity of teachers of the particular language, linguistic minorities isolated in different regions who would not come under the provisions of the Resolution passed by the Central Advisory Board of Education in this behalf may have to adopt the regional language as the medium of instruction. However, we have already referred to the provision in some States for linguistic minorities to be given the option of having their children taught through the mother-tongue, and we believe this is a wise policy in the general interests of all concerned.

Place of Hindi

The importance of learning Hindi has been stressed, since it has been adopted in the Constitution as the official language of the Centre. Hindi will be eventually the language used for purposes of all official correspondence between the Centre and most of the States, and as a large number of people speak this language, it may also become the language of communication for other than official purposes. In other words, it is expected to become the *lingua franca* of the country. It is therefore stressed that Hindi should be made a compulsory subject of study in the school course as otherwise those who do not study Hindi may be handi-

capped at a later stage if they wish either to enter service or to communicate more freely with those parts of India where the language is commonly used. It is also stated that a common language like Hindi, if known all over the country, would promote national unity and solidarity. Some of our witnesses have not seen eye to eye with the statement that language necessarily promotes unity. They have referred to many other countries where different languages have been recognised as State languages. Thus in Switzerland, four languages, German, French, Italian besides a modified form of Latin are recognised as official languages of the State and all correspondence is sent in the four languages. Likewise in Canada, English and French are recognised as official languages ; while in South Africa, Afrikan, Dutch and English are the three languages accepted.

Place of English

A great deal of controversy also exists about the place of English in the scheme of studies. As a result of historical causes, English has come to be the one language that is widely known among the educated classes of the country. It was stressed by some of our witnesses that much of the national unity in political and other spheres of activity has been brought about through the study of English language and literature and modern Western thought by all educated Indians. They also stated that the present position of India in the International sphere is partly due to the command that educated Indians have acquired over English. Many eminent educationists and scientists have, therefore, expressed the opinion that under no circumstances should we sacrifice the many advantages that we have gained by the study of English. They hold that in matters pertaining to education, sentiment should not be the ruling factor and that what was most urgently needed was that our youth acquire knowledge from all sources and contribute their share to its expansion and development. In the attainment of this objective, study of English was bound to play an important part. On the other hand, some of our witnesses have pressed the view that it is unnatural and inconsistent with the present position of the country to prescribe a foreign language as a compulsory subject of study. They have also drawn our attention to the greater importance given to English in the past and the consequent neglect of other languages and other subjects of the curriculum. They feel that the whole position of English in the educational system needs to be re-examined in the new set-up particularly at the Middle and High School level. They are definitely opposed to the introduction of English at the Basic stage, *i.e.* the first seven or eight years of a child's education.

Place of Classical Language

The classical languages have always exercised a great attraction though for a relatively small proportion of the educated people of any

country. To the bulk of Indians, Sanskrit which is mother of most Indian languages has always appealed both from the cultural and religious points of view. In the present state of affairs and in the light of the controversies that have been raging round the languages to be studied, many have deplored the fact that the classical language is being completely ignored. The number of persons that take to classical studies is diminishing rapidly and if this continues it is felt that the study of the classics which is of such immense value may eventally be completely neglected. There is a great deal to be said in favour of the view that the study of this language should be promoted and that those who wish to take to it should be given every encouragement possible. What has been stated about Sanskrit may also be said about the other classical languages. Those who have delved deep in the classical languages of Arabic and Persian or the few who have taken to Latin or Greek have likewise a feeling that these studies may not find a place in the future unless due provision is made for their study at the school stage.

Study of the Languages in Foreign Countries

In the light of all these observations and with the conflicting opinions that have been expressed on occasions with so much of vehemence, our task in approaching dispassionately a consideration of the place of languages in secondary schools has by no means been easy. We have therefore sought light on this subject from other countries : and we give below the information kindly furnished by some of the foreign Embassies in India on the position of the study of languages at the Secondary School.

In *France*, English is taught in all Secondary Schools from the begining, i.e. from the age of 11 (as an average), but it is not compulsory ; a pupil may prefer to take German, Italian, Spanish, or any other language taught in that institution. In fact, English and German are the only two languages which are taught everywhere, the choice of the student being divided more or less equally. The teaching of a foreign language (or of two, if one does not study Latin) goes on until the end of the school course, which always includes a test in foreign language.

In *Japan*, Enlish is taught in the schools. It is compulsory in the Secondary School course, and optional in High Schools or Universities

In the *Federal Republic of Germany*, the problem of foreign languages has a different aspect in Southern and Western Germany to that in Northern Germany, The following principles, however, seem to be prevalent. Where one language is taught besides German, it is English in general. In the Basic Schools (Grundashulen) English is voluntary. Berlin and Hamburg make English obligatory for all pupils from their tenth year of life. Wurtemberg and Baden have French instead of English. The Middle Schools, the Lower Secondary Schools and the Higher Secondary Schools teach several languages. English is always

obligatory ; the classical languages, Latin and Ancient Greek, are obligatory in the Humanistische Gymnasium, while French is voluntary. The real Gymnasium makes Latin and French obligatory while Greek remains voluntary. There are divergencies, of course, e.g. Russian can be learnt in the Berlin schools, Spanish in Hamburg, both are optional.

In *Egypt*, both French and English languages are compulsorily taught in schools, French being studied more extensively than English. Both languages used to be introduced after five years of schooling (including Kindergarten) in the third year of Primary schooling, but lately it was decided to delay their introduction until the completion of the four year of primary education and to start them in the first year of secondary education and continued there througout its five years' course.

In the *U.S.S.R.*, a foreign language is compulsory subject in the Soviet middle and secondary schools. The main foreign language taught in schools are English, German, French, Italian or spanish. Other languages are also introduced in some schools. Parents have the right to send their children to any school they like with any language they choose. It is usual for Russian children to begin to study foreign languages in the third or fifth year of their studies, They continue to study it till the end of the whole of school course ; some schools introduce a foreign language at the very beginning of school, i.e. in the first grade.

In *Iran*, English is taught in tne secondary schools, and is optional, It is introduced as an optional subject along with Russian, French and Arabic after 6 years of elementary schooling.

In *Sweden*, the first foreign language in the secondary school is English, this being taught from the first form (*i.e.* the 5th school years age 11 years) oywards. German is taught from the 3rd Form ; French is obligatory in the two upper grades only for those those who intend to continue their studies in the Gymnasium, Language studies in Swedish secondary schools extend over a long period, the English course usually lasting 8 years, the German 6 and the French 5 years. It constitutes, in point of fact, a special educational problem in this country. All studies at schools of university standard are, to a large extent, based on textbooks in English, German or French. Consequently no student can marticulate without having studied these three languages for some time.

It will be noted from what has been stated above that one or more foreign languages are included in the curriculum of secondary school in many countries.

Conference of Professors of Hindi

During the course of the enquiry, we learnt that the Central Government had called for a Conference of Professors of Hindi and a Conference of Professors of English at New Delhi, and we have since been

favoured with a copy of the proceedings and the resolutions that were passed. At the Conference of Professors of Hindi, held at New Delhi on the 20th and 21st January 1953, when representatives from 25 Universities with Departments of Hindi were present besides the officers of the Ministry of Education, the following resolutions were passed :—

"(*a*) The Conference was of the opinion, that no boy or girl of the Indian Republic should be deprived of an opportunity to learn Hindi, the official language of the Union, as a part of the school curriculm. The Conference therefore resolved that since the objective to be aimed at in both Hindi and non-Hindi areas is to introduce the study of Hindi in the secondary schools as a compulsory subject :

(*i*) all institutions in the country should be required to make compulsory provisions for instruction in the language ;

(*ii*) steps should be taken to make Hindi a compulsory subject forthwith in all Hindi areas and such non-Hindi areas as are ready to take this step ; and

(*iii*) where regional public opinion is not yet prepared for compulsion, Hindi should be made an elective subject, in which a pass will be essential to qualify for promotion to higher class.

The Conference further resolved that the standards of attainment in Hindi in secondary education for the Hindi areas would be progressively raised and must in no case fall below the standards now obtaining in such areas, while in the non-Hindi areas the standard would be based mainly on the students' capacity to comprehend the language and use it in simple everyday situations.

(*b*) The Conference was of the opinion that the objective to be aimed at in teaching Hindi in the schools for the training of Administrators and Diplomats is to enable them to use it effectively as an official language of the Union, as the lanuage of inter-State intercourse of all societies and institutions of an All-India character and also for diplomatic purposes. The standard should, therefore, be at least that of the Intermediate Examination in Hindi as an elective subject of any Indian University. Those who were already so qualified might be exempted from the examination.

(*c*) The Conference recommended that in vocational and technical shools and colleges in the Indian Union, the objective to be aimed at is to familiarise the trainees with the Hindi language to an extent where they are able to comprehend it in simple everyday situations."

Qualifications of Teachers of Hindi

Regarding the qualifications of teachers of Hindi, the Conference was of the opinion that the following minimum qualifications and experience should be laid down for teachers of Hindi in various stages for the next five years :—

(*a*) *School Stage*—Hindi speaking areas :

School : Primary and Junior Secondary stage :—At least Matriculation with Hindi as one of the subjects.

Higher Secondary :—A graduate with Hindi as an elective subject.

(*b*) Non-Hindi speaking areas :

School : Primary and Junior Secondary stage :—Matriculation with Hindi as one of the subjects, or equivalent qualification in Hindi.

Higher Secondary :—B. A. with Hindi as a subject or a qualification considered as equivalent.

Conference of Professors of English

A similar Conference of Professors of English of Indian Universities was convened by the Government in New Delhi on the 23rd and 24th January 1953, when 28 representatives of Universities were present besides representatives of the Ministry of Education and a Member of the Union Public Service Commission.

The Conference recommended :—

(*i*) that English should continue to occupy an important place in the curriculum of secondary school ;

(*ii*) that the aim should be the attainment by pupils of a good working knowledge of English at the end of the secondary stage ;

(*iii*) that the course in English should consist of detailed study of texts of simple modern English prose written within a vocabulary of about 2,500 "essential words, non-detailed study of books in prose and verse with a larger vocabulary for "rapid reading" and simple composition ;

(*iv*) that keeping in view the objective laid down in (*ii*) above and the present low standards of teaching, English should be taught as a compulsory subject for a period of six years at the secondary stage, but with improvements in the training of teachers of English it should be possible to curtail the duration of the course by one year, provided, however, that English is taught for six periods of fifty minutes each per week ;

(*v*) that pupils may, at their option, offer an additional course in English ; and

(*vi*) that facilities should be given for the training of Administrators and Diplomats in the use of English, both spoken and written.

Qualifications of Teachers of English

Regarding the qualifications of teachers of English the Conference made the following recommendations :—

> The minimum qualifications for the teaching of English in High schools shall be Bachelor of Arts Degree followed by a teachers' training Diploma in English. For teachers of English in Universities, the minimum qualifications shall be the M.A. Degree in English, or its equivalent preferably with First or Second class. The courses for the training of teachers in English at the school stage shall include an examination in spoken English. An elementary study of Phonetics and English life and institutions shall therefore form an integral part of the curriculum. Full use should be made of audio-visual and other modern aids of teaching. Short-term courses in methods of teaching should be organised for the benefit of teachers of English in the Universities.

Need for Qualified Teachers and Improved Methods

The teaching of a language and the case with which a pupil can learn such language depends to a very large extent on the teacher and on the type of literature that is placed at the disposal of the pupil at different stages of his study. We are generally in agreement with the recommendations regarding the qualifications of the teachers made by the representatives at the two Conferences convened by the Government of India on the study of English and Hindi. There is a serious dearth, at present, of well qualified and experienced teachers who can handle English classes in schools and colleges. We believe this is one of the important reasons for deterioration in the standards of English at the University stage. We are also of the opinion that the general tendency in educational circles and among the public to condone such deficiency in standards is also responsible for the rapid deterioration in the knowledge of English. We are convinced that if a language is to be learnt, it should be studied so as to use it effectively and with correctness in written or spoken form.

Likewise we feel that, at present, there is need for well qualified and experienced teachers, if the official language, Hindi, is to be properly learnt and used. We have noted with regret the lack of properly qualified teachers particularly in non-Hindi areas. The anxiety to spread

the teaching of Hindi in schools in these areas has led to a recognition of qualifications of various bodies by the authorities concerned, much to the detriment of the proper maintenance of standards in the language. This serious defect is to be noted at the University level also. While standards expected of students may vary slightly in Hindi-speaking and non-Hindi speaking areas, for the reason that Hindi is not the mother-tongue or the spoken language of the region, there can be no justification for the teaching of tfie subject by persons with meagre knowledge of the language and ill-equipped to arouse interest or enthusiasm in the student.

We recommend that in regard to other languages also. whether the mother tongue or regional language, there is need for a reorientation of the methods adopted in teaching the language. To try to cram into the young pupil a number of abstract terms and definitions of grammar and syntax, long before the student has learnt to read fluently simple prose, is to create in the young mind an averson for language classes. A contributory factor is the dearth of simple and entertaining reading matter in the language capable of creating in the pupil a desire and an eagerness to peruse such books. With the emphasis now placed rightly on the mother-tongue or regional language, we hope that (a) teachers of languages will be given training in the methods to be adopted in such teaching, and (b) that every encouragement will be given to well qualified persons to produce books in prose and poetry suited to the different stages of education of school children.

We have referred to the need to encourage the study of the classics at the High School stage. We believe that if the classics are to be studied by an increasing number of students and if they are to be become popular, there is even greater need for a revision of the methods of teaching them. In the modern set up of education, there is urgent need to revise old methods and to employ modern techniques in the study of languages, so as to interest the student and to create in him a love for the study of classics.

We have not referred to the need for the study of other foreign languages at this stage. We believe that the need for such study by a few of the students will increase with the role that India is bound to play in international affairs. It is in the interest of the country that there should be people who are conversant with one or other of the many foreign languages, European and Asiatic, because of their use in trade, commerce, politics and public affairs. We realise that in most cases the study of such languages may be usefully taken up at higher education levels, through the University or other institutions of higher training. We would, however, recommend that opportunities should be available in a few of the Higher Secondary Schools at least for some pupils to take up one or other of these languages should they so desire.

We may state that to the large majority, the study of languages would be a means to an end and not an end in itself ; to the few with a flair for languages the study of such language will be a life's mission and such scholars should be given every encouragement to contribute to the wealth of the language undismayed by the utilitarian considerations. Whatever be the objective, the maintenance of proper standards in the teachers and taught should always receive due consideration.

Conclusion

From what has been stated, it would be apparent that unanimity of opinion is hardly possible in the consideration of such an important subject. The differences reflected in the opinions expressed by our witnesses have also been reflected in the deliberation of the Commission. Some felt that English should no longer occupy its present position, that the scope and methods of teaching English should be changed and that during the transitional period the study of the subject may be made optional at the Lower Secondary stage. On this basis they have recommended that English should be an optional subject of study at the Middle School stage. Others, however, feel that under present conditions and taking due note of the development of the regional languages and the official language of the Centre, it is necessary that a sound knowledge of English should be considered a pre-requisite to studies at the higher levels of learning whether in the University or in other institutions. For this reason, it is stated that English should be a compulsory subject of study in the Secondary School beginning from the Middle School stage.

The question has been raised whether in view of the possibility of a large number not pursuing higher courses of study, a foreign language should be made compulsory for such persons. It is difficult at any stage to determine with any degree of certainty those who can proceed to higher education and those who cannot. Nor can it be suggested that a particular group will not be in a position to take to higher education at a particular stage of study. In view of these difficulties it is suggested that no student should be handicapped by ignorance of a language which will ultimately determine the career that he should choose. It should also be recognised that even in regard to many of the diversified courses of instruction as matters stand at present, a knowledge of English will be extremely useful for understanding the subject better and for further study of the same subject. All these considerations lead to the conclusion that a study of English should be given due position in secondary schools and facilities should be made available at the Middle School stage for its study on an optional basis.

In the case of those students passing out of the Senior Basic Schools or from Middle Schools who have not taken English as a subject of study provision has been made in the curriculum for an elementary course in

English. In the case of those who wish to go to higher education, special arrangements should be made in the Secondary Schools to enable them to take the advanced course in English.

As regards the study of Hindi, it is felt that in view of its becoming the official language of the Centre and of some States, every pupil at the secondary stage should be given an opportunity of acquiring a basic knowledge of the language and it be left to him to develop it according to his needs. From this point of view it is stressed that Hindi should be taught during the middle school or the senior basic stage.

We have already referred to the fact that in regard to the position of Hindi as a spoken language, the country may be divided into three regional groups. Consequently, the standard of achievement in these three areas may be different ; in this connection we endorse the recommendation made by the Conference of Professors of Hindi, that the standard in Hindi areas should progressively raised, while in the non-Hindi areas the standard should be based mainly on the student's capacity to comprehend the Language and use it in everyday situations.

As regards the classical language, it is felt that provision should be made for students desiring to take to these studies to have the necessary opportunity to do so either at the High School or Higher Secondary School stage.

It was felt by some that in view of the difficulties already pointed out in the regions, it should be left to the regions themselves to plan out how best these languages could be studied at the different stages of the secondary school, We, however, feel that under present circumstances it should be possible for a child to learn three languages. It is no doubt true the scripts being different strain will be a little heavy, but we believe that it is easier for the child to learn these languages at an early stage, than at a later stage. At the Senior Basic or the Middle School stage, therefore, when the child has already learnt the mother-tongue and it will continue to pursue its study, Hindi and English may be introduced. A principle, which we feel, is necessary to observe is that two different languages should not be introduced at the same time and therefore one of them should be introduced at the initial stage and the other a year later.

At the end of the Lower Secondary of Senior Basic stage, it should be left to the pupil concerned to continue the study of one or the other of two languages, viz., Hindi and English and to take to a classical language at the High School or Higher Secondary school stage should he so desire. The selection of language can therefore be left to the pupil at the High School or Higher Secondary stage depending on the nature of the course he proposes to pursue.

In regard to some of the vocational courses taken in the diversified scheme of studies at High School or Higher Secondary stage, it may be necessary that English should be continued. The question whether English should continue to be used for certain technical or technological subjects at the Higher Secondary stage and at the University has been widely canvassed. It has been represented that at present neither the regional language nor the federal language can step into the breach and supply the necessary literature in the particular subject of study for the higher stages of learning. Among the reasons stated were : the great paucity of standard books in the languages concerned ; at present several of the languages are still in the process of developing a literature suited to the exposition of modern scientific thought. It is important to realise that if books are to be produced, they must be produced not as translations but as original works by authors competent to write such books and in the language concerned. The paucity of authors who have contributed to the literature in scientific and technical subjects in India is well-known. The necessity, therefore, of reading in English or in some foreign language many of the books now produced in higher ranges of learning cannot be disputed ; moreover English is at present the medium of instruction in many Universities and will be the language used by the Centre and certain States for some years to come. It is felt that until books written in the regional languages replace books now available in a foreign language, it is inevitable that students will need to have a good knowledge of English to study the subjects in the books available in that language.

SUMMARY OF RECOMMENDATIONS

1. Mother-tongue or the regional language should generally be the medium of instruction throughout the secondary school stage, subject to the provision that for linguistic minorities special facilities should be made available on the lines suggested by the Central Advisory Board of Education.

2. During the Middle School stage, every child should be taught at least two languages. English and Hindi should be introduced at the end of the Junior Basic stage, subject to the principle that no two languages should be introduced in the same year.

3. At the High and Higher Secondary stage, at least two languages should be studied, one of which being the mother-tongue or the regional language.

CHAPTER VI

CURRICULUM IN SECONDARY SCHOOLS

I

For many decades there has been a strong and persistent criticism of the existing secondary school curriculum. During the course of our investigations we heard these criticisms repeated over and over again.

The main points of these criticisms are that

(*i*) the present curriculum is narrowly conceived,

(*ii*) it is bookish and theoretical,

(*iii*) it is over-crowded, without providing rich and significant contents,

(*iv*) it makes inadequate provision for practical and other kinds of activities which should reasonably find room in it, if it is to educate the whole of the personality,

(*v*) it does not cater to the various needs and capacities of the adolescents,

(*vi*) it is dominated too much by examinations, and

(*vii*) it does not include technical and vocational subjects which are so necessary for training the students to take part in the industrial and economic development of the country.

A Narrow Conception of the Curriculum

In our opinion, there is room for some of these criticisms. It would not be correct to state, as some maintain, that the present curriculum has no goal in view. What is true, however, is that it is narrowly conceived, mainly in terms of the admission requirements of the colleges. This continues to be the case even today in spite of the many attempts made from time to time to remedy the defect. At one time, the examination at the end of the High School was known as the "Entrance Examination," thereby clearly indicating its scope and purpose. At a later stage, it came to be known as the Matriculation Examination denoting very much the same thing though in a different manner. The word 'matriculation' implied that its purpose was the registration of students for entrance to the University. The present practice is to call it the School Leaving Certificate or Secondary School Examination implying thereby a certain shift of emphasis in the purpose of the examination.

But, unfortunately, this is more nominal than real. Even now most of the pupils who sit for this examination aspire to join college. If they do not, or cannot do so, it is generally due to financial reasons. The demands of collegiate education still hold sway over the entire field of school education in India. We were informed that certain high school courses are unpopular because there is no provision for pursuing them at college. This has tended to bring the high school courses into closer conformity with the pattern of University courses. Another factor which has had the same effect is the close dependence of public services on University degrees. Most of the higher posts in the public services are not open to any one who has not passed a University examination. Elsewhere in this report we have discussed at some length the adverse effects of the present method of recruitment to the public services on secondary education and have suggested certain measures for improving the position.

Emphasis on Bookish Knowledge

Owing to the great influence that the college curriculum exercises over the secondary schools curriculum the latter has become unduly bookish and theoretical. University courses are, by their nature, academic and theoretical and deal largely with abstractions and generalisations. It is only in the last fifty years that practical and applied aspects of different branches of knowledge, chiefly the sciences, have found a place in the University courses but even now the emphasis is more on the academic than on the practical aspects. At the high school stage we definitely need a different approach. The High School pupils do not yet possess the intellectual maturity to deal competently with abstract theories and generalisations. Moreover, these schools have to cater for pupils, many of whom are not academically minded and all of whom will certainly not go to the University. In fact, under normal circumstances, the majority of the high school leavers do, and should enter into practical life. For such students a narrowly conceived bookish curriculum does not obviously provide the right kind of preparation. They need to participate in various kinds of intellectual and physical activities, practical occupations and social experiences which is not possible through the mere study of books. In the course of the last half century, a realisation of this fact has brought about almost a revolution in the conception of the high school curriculum. In many educationally progressive countries, its scope has been very much widened and its purpose is to cater for the entire range of the pupil's interests and capacities—intellectual, physical, emotional, aesthetic and social. For his all-round development, we must provide a wide and varied range of occupations, activities and experiences. We must give him practical training in the art of living and show him through actual experience how community life is organized and sustained. We have to do all this, not because we necessarily want our pupils to start earning their living immediately, but

because such knowledge and experience contribute to the all-round growth of their personality. This advocacy of a broad-based curriculum, catering for an all-round development of the pupil should not, however, be confused with another issue which many of the witnesses raised regarding the content of the various subjects of the curriculum. They complained of the over-crowding of the present syllabus, of the multiplicity of subjects and the heavy content-load in the different subjects. There is a great deal of justification for this criticism. It is desirable, in the first instance, to reduce the multiplicity of subjects as much as possible. It is not often realised that the complaint of over-crowding is largely due to the multiplicity of subjects, presented as separate entities, without bringing out their organic interrelationship. So in forming the curriculum an attempt should be made to see whether certain subjects can be grouped in large, organically related units dealing with certain broad areas of human knowledge and interest. Thus it is psychologically preferable to present subjects centering round the study of the social environment and human relations under the comprehensive heading of "Social Studies" than to teach a number of separate subjects like History, Geography. Civics and Economics in water-tight compartments. Similarly, the study of the physical environments and man's relation to Nature can be presented fruitfully through a coherent and organically related syllabus in "General Science." Teaching of separate subjects like Physics, Chemistry, Botany, Zoology, Hygiene, etc., may have certain advantages from a narrow instructional point of view but, apart from the fact that this involves over-crowding of the syllabus, that approach does not give the students a realistic and organic understanding of the world in which they are living. Each particular subject becomes a group of facts, principles and formulate to be learnt rather than a window opening out on a certain, significant aspect of life. A clear realization of the difference between these two approaches will provide a valuable principle of guidance both in organization of the curriculum and the choice of right methods. Moreover, if children are given an opportunity to carry on practical activities in connection with the various subjects that they are learning—for instance, laboratory work in the teaching of science—it tends to reduce the feeling of boredom.

There is also an undoubted tendency to crowd the syllabus of each subject with too many facts and details, often of little significance and an unwelcome burden on the memory. Our curriculum makers have usually suffered from the besetting sin of the "specialist" who tries to put as much as of his favourite subject matter as possible into the curriculum and the textbooks and is more concerned with the logical and scientific demands of the subject than the needs, the psychology and the interests of the learners. Often Committees of Courses which meet for the reorganisation of the syllabus end up by introducing additional subject

matter, unrelated to the students' life and interests, instead of carefully sifting the contents from the point of view of their *significance* and *relevance*. The syllabus of History is good instance of this tendency where, even at the upper Primary or lower Secondary or senior Basic stage, long-forgotten incidents and persons of ancient history have been resuscitated under the fond delusion that learning certain dull facts about them will enrich the students' mind and deepen their appreciation of national culture. This wrong approach is due to the failure to realize the difference between *rich* subject-matter and a large heap of miscellaneous items of information. Only that curriculum content is justifiable in schools which adds to the understanding or the appreciation or the efficiency of students and can be grasped by them intelligently, pleasantly, and with a clear realization that, in some way, it is contributing to the enrichment of their life and activities. We have stressed this fact at some length because we are convinced that unless the syllabus of every school subject is, on the one hand, *lightened* by dropping overboard the cargo of inert, uninteresting and useless subject-matter and, on the other hand *enriched* by the inclusion of interesting and significant material that will give joy and insight to students, it cannot become a truly educative medium. And the criterion for deciding what is interesting or uninteresting, significant or otherwise, must *not* be the recommendation of the scientist or the historian or geographer or the litterateur but the attitude of the students and intelligent, understanding teachers. In view of the importance of this matter we would recommend, as a proposal of high priority, the establishment in such States and at the Centre—preferably in association with Teachers' Training institutions—of Bureaus or Boards charged with the duty of curriculur research on lines which have been successfully tried in some Western countries, notably the United States. It should be the function of such Boards constantly to evaluate and sift the existing curricular in the light of students' psychological interests as well as the changing and developing sociological needs. The details of the curricula in each subject should be settled on the basis of this continuous research.

In this connection it is important to bear in mind that it is neither possible nor desirable to teach children all the facts, even the most important of them, that they are likely to need in latter life. It is often this ill-conceived desire that is responsible for the present over-crowded and unsuitable syllabus : if it is resisted, they could be considerably lightened. It is more important to awaken interest and curiosity in the child's mind to teach him the methods and technique of acquiring knowledge than to burden his memory with miscellaneous information "against the rainy day." If he has acquired this mastery over the tools of learning, he will be able to add to his knowledge under the spur of felt need. Our teachers should remember that completion of the school course or of the college course is not the end of education which is in

reality, a continuous life-long process. Even a little knowledge, acquired pleasantly and thoroughly and with the feeling that it has real significance for us, is better than a great deal of miscellaneous, ill-digested knowledge unrelated to life. The former will quicken interest and open the gateway to continuous learning ; the latter may kill curiosity and create distaste for further learning. In organizing our curricula and selecting methods of teaching, we must not lose sight of this crucial principle.

Lack of Adaptation to Individual Differences

During the period of adolescence, pupils develop individual tastes, interests and special aptitudes, but the present curriculum hardly takes note of these individual differences. At one time it was generally held that these differences begin to manifest themselves at about the age of 11 and this provided the basis for a break at that age in the educational pattern. But later researches tend to the conclusion that this development takes place nearer 13. Whatever be the precise age when these differences appear, they have an important educational significance with which educationists must reckon. There have been many attempts to classify these varied abilities under certain board categories for purposes of education and educational organisation. In England, three broad categories are recognised—academic, technical and practical—corresponding to which there are three different types of Secondary schools—Grammar Technical and Modern. In India also a few States have made an attempt to introduce different types of Secondary courses for pupils of different abilities. But, on the whole, the present curriculum does not make adequate provision for this diversity of tastes and talents. High School courses do provide for certain 'option' : but very often the scope and range of such options is narrow and limited. What is needed is a broadly conceived curriculum which will give free room for the development of different types of abilities through studies and activities, congenial to such development.

Domination by Examinations

There can be little doubt that the present secondary curriculum is dominated by examinations. It is a matter of everyday experience to which teachers, parents and children can all bear testimony because all suffer under its strain. We have discussed the influence of examinations on education in a separate chapter and it is not, therefore, necessary to dilate on this problem here.

Lack of Provision for Technical and Vocational Studies

There is a long standing complaint that secondary schools have made no provision for technical and vocational subjects. To meet this criticism attempts have been made from time time—for example, in 1882 by the

Indian Education Commission which recommended the introduction of practical and pre-technical and pre-vocational subjects—to set right this deficiency. These and more recent attempts made by Universities and other bodies which control Secondary education, have not proved very successful. One main reason for this failure is that provision for Technical education must go along with the development of industries ; it cannot precede or bring about such progress. Lack of industrial and commercial development in the country was responsible for the unpopularity of such courses wherever they were introduced. Absence of well-trained teachers and proper material facilities was another contributory factor. Moreover, the immense prestige of the Universities and the lure of their "academic" courses also stood in the way of those new courses meeting with proper response. The situation has, however, radically changed now. Our industrial revolution has started and, under its impact, the character of Indian economy has begun to change slowly but inevitably. The second world war has greatly hastened the process and accelerated the pace of industrialisation. With the attainment of political freedom recently, the expansion of industries has become an integral part of national policy. The Planning Commission has drawn up an elaborate plan for the rapid industrialisation of the country and the first Five Year Plan has been launched already. All this underlines the importance of Technical education and holds out the hopes that new avenues of employment will open out for persons possessing technical training and competence. In the field of Secondary education this calls for the introduction of diversified types of courses to meet the needs of an expanding industrial economy. If Secondary education remains exclusively academic and does not develop practical skills and aptitudes, suitable candidates will not be forthcoming for admission to Technical Institutions which will not, therefore, be able to pull their full weight in our national life. On the other hand, a suitable reorientation of Secondary education will help to produce skilled workers and technicians who will provide efficient personnel for industry and make our various national projects successful. In fact it is the special function of Secondary education to provide the country with the second line of its leaders in all walks of national life—art, science, industry and commerce. The present unilateral system is not planned to provide such leadership which is yet another argument for its diversification.

We might perhaps sum up all these criticisms by saying that, like Secondary education, the secondary curriculum is out of tune with life and fails to prepare students for life. It does not give them a real understanding of, or insight into, the world outside the school, into which they will have to enter presently. The starting point for curricular reconstruction must, therefore, be the desire to bridge the gulf between the school subjects and the rich and varied activities that make up the warp and woof of life.

The Basic Principle of Curriculum Construction

We are now in a position to enumerate briefly the principles on which the curriculum should be based. These have been brought out by implication already in the preceding discussion but it will be helpful to restate them clearly and coherently. In the first place, it must be clearly understood that, according to the best modern educational thought curriculum in this context does not mean only the academic subjects traditionally taught in the school but it includes the totality of experiences that pupil receives through the manifold activities that go on in the school, in the class-room, library, laboratory, workshop, playgrounds and in the numerous informal contacts between teachers and pupils. In this sense, the whole life of the school becomes the curriculum which can touch the life of the students at all points and help in the evolution of balanced personality.

Secondly, there should be enough variety and elasticity in the curriculum to allow for individual differences and adaptation to individual needs and interests. Any attempt to force uncongenial subjects and studies on children, unfit to take them up, is bound to lead to a sense of frustration and to hinder their normal development. There are, of course, certain broad areas of knowledge, skill and appreciation with which all children must come into contact and these must find place in the curriculum. We shall discuss presently what these subject-areas are, but it is necessary that they should be kept to the minimum and should not be beyond the students' powers and capacities. In other words, the same standard of achievement should not be expected of all.

Thirdly, the curriculum must be vitally and organically related to community life, interpreting for the child its salient and significant features and allowing him to come into contact with some of its important activities. Obviously, this would imply giving an important place to productive work which is the backbone of organised human life. It would also postulate that a general curriculum, which may be prescribed by the Education Department for a whole school system, must be capable of adaptation to local needs and situations. The teacher should build up in the minds of the students a lively sense of being an integral part of the local community and the local community should be enabled to realize that the school is a vital and invaluable part of its life.

Fourthly, the curriculum should be designed to train the students not only for work but also for leisure. We have already argued the case for the introduction of a variety of activities - social, aesthetic, sport, etc.,—in the school. This is recommended not only to make a school life pleasant and meaningful for the student here and now but also because the cultivation of varied interests and different hobbies provide excellent training for leisure which, after all forms an important and quantitatively quite large area of every individual's life.

Fifthly, it should not stultify its educational value by being split up into a number of isolated, uncoordinated water-tight subjects. Subjects should be inter-related and, within each subject, the contents should so far as possible be envisaged as "broad fields", units which can be correlated better with life rather than narrow items of information.

The Curriculum at the Middle School Stage

We are now in a position to indicate in broad outline the curriculum for our future Secondary schools. These schools fall into two main categories. The first category includes Middle schools and senior Basic schools, schools which cater generally for the pupils of the age-group 11 to 13. The second category includes High schools and Higher Secondary schools, the High schools providing a three-year course and the Higher secondary a four-year course. The age-range of pupils in High schools will approximately be 14 to 16 and in Higher Secondary schools 14 to 17. The necessity for maintaining, for the present, two different types of Secondary schools, High school and Higher Secondary schools has already been explained in Chapter IV of our report.

The middle or senior basic stage is a continuation of the primary (junior basic) stage. As long, therefore, as Middle schools exist, their course must not differ materially from the senior basic course. Eventually those schools can easily be transformed into senior Basic schools. It is not really desirable to have the distinct and separate types of courses at this stage, as the existence of basic and non-Basic school side by side tends to create a kind of unhealthy caste distinction in education. The main difference between the Middle school and Senior Basic school courses will be in the method of approach and of teaching ; but the educational programme, *i.e.* the subjects and courses to be covered and the activities undertaken, will as far as possible be similar.

Again, as the Middle or senior Basic stage is a continuation of the primary stage, it is necessary to observe in framing the curriculum and planning the work for it that there is not a violent departure from the previous stage either in the contents of the curriculum or of the methods. We have kept this principle in view in recommending the curriculum for the middle stage. Regarding methods, it is not an accepted principle that the primary curriculum, whether the basic or non-basic, should be based on activities. Therefore, in the Middle school curriculum, the emphasis should be on activities so that there may be no departure from the principles underlying the pupils' education at the primary stage.

The special function of the curriculum at the middle stage is to introduce the pupil in a general way to the significant departments of human knowledge and activity. These will naturally and obviously include language and literature, social studies, natural sciences, and mathematics which have always formed part of every Secondary school

curriculum. But there are a few other subjects whose claims are not so freely admitted, or admitted in a grudging manner so that their position in the curriculum is regarded as ornamental or at best secondary. In this group we include art, music and craft. These subjects demand expression and achievement, with as much importance in their own way as the purely intellectual subjects ; and they can be used for the education of the human mind as easily and effectively as the so-called intellectual subjects. Historically speaking, these came much earlier in the field of human activity long before subjects like mathematics, science and others came to be formalised and regarded as worthy of human pursuit. As valuable media for the development of the emotional side of the mind their place is certainly higher than that of the ordinary subjects. Their inclusion in the school curriculum is valuable for the proper development of the emotions and helpful to the growth of other aspects of the personality—intellectual, aesthetic and spiritual. Who could deny the intellectual and asthetical value to a student in the creation, undertaking and completing of a price of art or music or handwork ? No apology is needed today for including art, music and crafts as essential elements in the school curriculum.

It will be noticed that we have not included Physical education in the above list of subjects. This is not due to any lack of appreciation of its place and importance in the educational programme. We consider it much more than a 'subject' in a curriculum. One of the main aims of education is the proper physical development of every pupil, so essential for building up a healthy and balanced personality. As intellectnal development comes through the study of various subjects so physical development comes through various forms of activities. It is much wider than what is usually denoted briefly by the term 'P.T.' So Physical education as series of activities will form a part of the curriculum but the approach to it will be somewhat different from the approach to other subjects.

We have stated that the function of the middle school curriculum is to introduce the pupil in a general way to certain broad fields of human knowledge and interest. We would like to underline the phrase '*in a general way*'. The Middle school is not the place for specialisation but the stage when a general introduction to all the broad and significant fields of knowledge can and should be given. The phrase '*in a general way*' indicates the scope of the course ; it is not the depth of knowledge in any particular field but familarity with the different important fields in which human mind has been active throughout the ages and out of which the pattern of human culture has been evolved. The purpose therefore is two-fold : the child as the inheritor of the treasures of human civilisation has the right, firstly, to know what its main components are and, secondly, as a result of acquiring that knowledge to choose at a later stage, the particular field in which he can in his own way contribute his

share to this fund of human culture. Therefore, strictly speaking, nothing which has abiding and significant value for humanity can be omitted from the child's curriculum. Great discrimination will be required in selecting from this vast treasure such elements as the child can understand and appreciate at this stage. Again, it is in this middle stage that the special abilities and interests of the individual child tend to crystallise and take shape. In view of this, the Middle school curriculum has to be of an exploratory character. By providing a broad-based and general curriculum and an appropriate environment in the school, we can help the child to discover his own tastes and talents.

It may be argued that such an approach is likely to make the curriculum heavy. It need not be so, since what we are aiming at this stage is not depth of knowledge in any particular field but a general understanding and appreciation of the significant elements of human culture. The curriculum must not be overloaded with too many facts and items of information with what Whitehead has called "dead bits of knowledge." The aim should be to give the child an appreciation of human achievement in different fields, to widen his outlook and broaden his sympathies.

Keeping in view the above considerations we suggest the following broad outline of the Middle school curriculum :

1. Languages,
2. Social Studies,
3. General Science,
4. Mathematics,
5. Art and Music,
6. Craft, and
7. Physical Education.

Under languages, will come the mother-tongue, the natural medium of self-expression or the regional language. Next would come the official language of the Republic, i.e., Hindi, a knowledge of which is necessary in the wider interests of national life and national unity. Where Hindi is the mother-tongue, the pupil may study another language.

The place of the different languages in our educational programme at diffetent stages has been fully discussed in the earlier chapter. In view of the arguments stated there, it is necessary for the present to find a place for English in the Middle school curriculum. Every school should make provision for the teaching of the official language, Hindi and the international language, English. It may, however, be provided that English is not to be treated as a compulsory subject of study if the pupil or guardian does not wish it to be studied. In the case of those

pupils who do not desire to study English, an alternative arrangement should be made for the study of another language. In schools which provide for the study of English on an optional basis there should also be alternative arrangements for an advanced course in the mother-tongue for those who do not take the optional course in English.

With two other languages besides the mother-tongue, the course in languages will be rather heavy. It is unavoidable in a country like ours which has a multiplicity of languages and we should be prepared to pay this price for the wealth of our linguistic heritage. One mitigating fact, however, is that these languages will be introduced when the child will have acquired a certain amount of mastery over his mother-tongue. Also in order to lessen the burden we have already suggested that only one new language should be begun in any one year. Moreover, with regard to the second and third languages the emphasis will be on the language aspect only. The aim will be to introduce the child to the practical use of the two languages while the literary aspect will be kept definitely in the background.

We have already explained at some length why it is important to include art, music and craft in the middle school curriculum. With regard to art and music, a certain amount of natural ability is needed for efficiency and every child will not be able to attain the same standard; but there is no reason why every child should not be given a chance to benefit by the culture values implicit in the study of art and music.

With regard to crafts we would like to emphasise the importance of the local crafts and the use of local materials. They have a tradition behind them which will be familiar to every child in the locality. They also possess a certain amount of emotive significance which has considerable educational value.

The Curriculum at the High and Higher Secondary School Stage

By the end of the Middle school the special abilities and interests of the pupils would generally be taking definite form; at least it will be so with most of the pupils. So the curriculum at the High school stage (both for High schools and Higher Secondary schools) should be, as far as possible, framed on the basis of these abilities and interests. We have no scientific data available to help us to arrange in categories—if that were possible—these special abilities and interests in terms of well defined and compact educational programmes. But if a number of well thought out programmes are offered, the young people will be in a position to choose from among them in accordance with their own abilities and inclinations. So we have to provide varied courses in high schools and Higher Secondary schools with a fairly wide latitude for choice. This however, is not to be treated as specialisation in the narrow sense of the word. Its primary object is to provide suitable scope for the

development of the special interests of pupils. Specialisation, on the other hand, implies exclusiveness of interests which is rightly condemned at too early an age. A reference to the curriculum suggested by us would indicate how we have tried to avoid that kind of narrow specialisation.

In the High school stage there is yet another criterion which will help us in deciding what would be the appropriate curriculum for any particular pupil. For the large majority of these adolescents this will be all the education that they will receive. In a normally functioning educational system, not more than twenty-five to thirty per cent of the pupils in High schools are likely to go to the Universities and other institutions of the higher learning such as technological and similar institutions. So most of them have to think of earning a living and the educational programme should give them some training in this direction—not so much in terms of specific vocations as in training their practical aptitudes in preparation for definite vocational work later. The educational programme will not be narrowly vocational, but will have a definite vocational bias. For example, a young student who shows signs of mechanical aptitude and is interested in things mechanical may take a course with a technical bias—not to become an engineer but to get a general introduction to that field of engineering which he may like to choose, as his vocation after further training. Besides, giving him some training of a technical kind, the course should also give him a reasonable amount of general education so that he may be fit to discharge his duties as a human-being and citizen trained in the greatest of all arts—the art of living. Similarly, another student may take a course in agriculture not necessarily to become a farmer, but because he is interested in agriculture as a most valuable human occupation and an essential part of the human economy. His understanding of the various aspects of agriculture would certainly take him a better member of society, even though he may not actually become a farmer. A good teacher should always be able to exploit the educational possibilities implicit in these subjects. There is no doubt that the so-called technical subjects have considerable cultural value, which should be fully explored. In fact, with the great advances during the last hundred years in science and technology, the concept of culture itself has become wider and more comprehensive; science and technique are as much a part of it as the older diciplines of liberal studies. It is this approach which will have to be adopted in our secondary institutions distinguishing them from the purely vocational schools.

There is yet another consideration which will determine the organization of the curriculum in these High schools and the Higher Secondary schools. Pupils will come to them from Middle schools as well as senior Basic schools. As long as some differences exit in the courses and methods of teaching in these two types of schools, it would be

advisable to provide an initial period of transition in the High school stage which will enable students drawn from different schools to pass through certain common educational experiences and programmes and develop a common outlook and approach to their work. Therefore, we suggest that in the first High school year the courses should follow, to some extent, the general pattern of courses in the preceding stage and that differentiation should come in the second year.

The courses in the High schools and the Higher Secondary schools will follow the same pattern. They will consist of certain core-subjects common to all and certain optional subjects. The difference in the period of education (three years in the one case and four years in the other) makes it necessary to have two levels of integration of the subject-matter with the core subjects as well as the optional subjects. The high schools will obviously offer a lighter course as far as the contents are concerned but within the limits of each particular course, there should be as much integration of subject-matter as possible. It is lack of such integrations which makes the curriculum open to the criticism of being disjointed and overloaded.

The need for developing an integrated course is so great that, instead of allowing pupils to choose from a very wide range of options according to their individual inclination—as is done in certain countries and even in some States in India—we have preferred to group subjects under certain broad headings in order to allow for some amount of integration and correlation. Complete freedom of choice without any guidance either from parents or from teachers is not educationally desirable and in the choice of subjects within a group, the pupils should get the benefit of experts educational guidance. Such guidance is essential for the success of any educational programme and we hope that before long it will be available to all our educational systems. We have discussed this problem of educational and vocational guidance at some length in Chapter IX of our Report.

We are now in a position to give the broad outline of the curriculum at the High school and the Higher Secondary stage. This curriculum is intended to be only suggestive and no attempt has been made to work out the details under each subject. The State Departments of education will have to work out the details and fill the outline after making a careful study and investigation of the problem as we have elsewhere suggested.

The curriculum as we envisage it will consist of the following :—

A. (i) Mother-tongue or Regional language or a composite course of the mother-tongue and a Classical language.

(ii) One other language to be chosen from among the following :

(*a*) Hindi (for those whose mother-tongue is not Hindi).

(*b*) Elementary English (for those who have not studied in the middle stage).

(*c*) Advanced English (for those who had studied English in the earlier stage).

(*d*) A modern India language (other than Hindi).

(*e*) A modern foreign language (other than English).

(*f*) A classical language.

B. (i) Social Studies—general course (for the first two years only.

(ii) General Science including Mathematics—general course (for the first two years only).

C. One Craft to be chosen from the following list (which may be added to according to needs) :

(*a*) Spinning and Weaving.

(*b*) Wood-work.

(*c*) Metal work.

(*d*) Gardening.

(*e*) Tailoring.

(*f*) Typography.

(*g*) Workshop Practice.

(*h*) Sewing, Needlework and Embroidery.

(i) Modelling.

D. Three subjects from one of the following groups :

Group 1 (*Humanities*)—

(*a*) A classical language or a third language from A (ii) not already taken.

(*b*) History.

(*c*) Geography.

(*d*) Elements of Economics and Civics.

(*e*) Elements of Psychology and Logic.

(*f*) Mathematics.

(*g*) Music.

(*h*) Domestic Science.

Group 2. (*Sciences*)—

(*a*) Physics.

(*b*) Chemistry.

(c) Biology.

(d) Geography.

(e) Mathematics.

(f) Elements of Physiology and Hygiene (not to be aken with Biology)

Group 3. (*Technical*)—

(a) Applied Mathematics and Geometrical Drawing.

(b) Applied Science.

(c) Elements of Mechanical Engineering.

(d) Elements of Electrical Engineering.

Group 4. (*Commercial*)—

(a) Commercial Practice.

(b) Book-keeping.

(c) Commercial Geography or Elements of Economics and Civics.

(d) Shorthand and Typewriting.

Group 5. (*Agriculture*)—

(a) General Agriculture.

(b) Animal Husbandry.

(c) Horticulture and Gardening.

(d) Agricultural Chemistry and Botany.

Group 6. (*Fine Arts*)—

(a) History of Art.

(b) Drawing and Designing.

(c) Painting.

(d) Modelling.

(e) Music.

(f) Dancing.

Group 7. (*Home Science*)—

(a) Home Economics.

(b) Nutrition and Cookery.

(c) Mother Craft and Child Care.

(d) Household Management and Home Nursing.

E. Besides the above a student may take at this option *one* additional subject from any of the above groups irrespective of whether or not he has chosen his other options from that particular group.

It will be noticed that in this curriculum a pupil will ordinarily be required to take one other language besides his mother-tongue. It may be Hindi or English or any other language according to his needs and choice. This arrangement will meet with the ordinary requirements of most pupils. We are definitely of the opinion that the curriculum should not be loaded with too many languages and while a majority should only study languages which are absolutely essential, those who possess linguistic ability should be able to take an additional third language, and in special cases under the note at E, he can choose yet another language if he cares to do so.

We have recommended that a general course in social studies and general science should be provided at the high school stage for those who do not take up these (or allied subjects) among their optionals. These two subjects together with the languages and a craft will really form the common core of the high school course. To this will be added the group of special subjects chosen by the pupil in accordance with his abilities and interests.

The courses in social studies and general science will be of a general nature and they will be taught in the first two high school years only, but they will not be examination subjects. Their main purpose will be to explain more fully than was possible in the middle stage—in an intelligent manner and without going into details—the social movement and forces which are shaping their lives and the contributions that science is making in changing and regulating the social pattern. All should know something about them in order to live intelligently in the fast changing world of today. We shall discuss the purposes of teaching these two subjects a little more fully later.

A word of explanation is necessary to indicate significance of the phrase "those who do not take up these or allied subjects among their optionals" occurring in the last but one paragraph. A pupil taking up either History or Geography or Elements of Economics and Civics, in the "humanities" group will be required in the second year when differentiated courses begin to take up the course in general science and not in social studies. Similarly a pupil taking the sciences, under the 'science' and 'technical' or 'agricultural' group should take the course in social studies, but not in general science. Students who take the commercial group will be studying some phases of social studies as a part of their course in commercial geography or elements of Economics and Civics. In that case they will be exempted from taking the social studies course but they will take the course in general science. For students taking the fine arts group some knowledge related to social studies may be covered in the course on the history of art. So they take the course in general science but not, ordinarily, in social studies.

The home science group should, we feel, take both social studies and general science for the first two years.

We have recommended that every high school student should take one craft. We consider it necessary that at this stage, every student should devote some time to work with the hands and attain a reasonably high standard of proficiency in one particular craft, so that if necessary, he may support himself by pursuing it. But it is not on economic grounds only that we make this recommendation. By working with the hands the adolescent learns the dignity of labour and experiences the joy of doing constructive work. There is no greater educative medium than making, with efficiency and integrity, things of utility and beauty. It trains practical aptitudes, facilitates clarity of thinking, gives chances for co operative work and thus enriches the entire personality.

The craft chosen at the high school stage may or may not be the craft taken in the middle school stage by the pupil. While, no doubt, a certain amount of mechanical skill will be attained at the end of the middle school stage, there will be ample room for him to attain a higher standard of efficiency in the high school. For example, the aesthetic aspect will come into fuller play in this stage. An intellectual study of the economics of the craft and of the science involved in the craft processes will also be duly stressed. But the pupil should have the freedom to choose a new craft, if he so likes, when he comes to the high school. The period of time he can devote there is long enough for him to achieve a fairly high standard of efficiency in the new craft.

The training in craft requires two fundamental principles to be observed. So far as the craft itself is concerned, proper training can only be given by one who is an expert in that particular craft. The second principle is that in giving this education in craft, the utilisation of the craft for craft-centred education will be possible only if a trained teacher fully qualified in the craft and in the scientific aspects thereof is available. For a transitional period, it will not be possible to get the teachers who are well-versed both in the craft and in the scientific aspects of teaching of the craft. Craft teaching in training colleges for a limited period of nine months or a year cannot possibly produce this type of teachers : and in craft education is not to suffer once again and be neglected in schools by being entrusted to such partially trained teachers who have not yet developed the skill in the craft sufficient to exemplify to the students, it will be necessary in the interim period for some years that a trained craftsman though not fully educated in the formal way should be associated with the trained teacher in the teaching of the crafts to the pupils. The expert in craft may be engaged on a part-time basis and may be able to help in training the boys in more than one type of craft. Another alternative is that such a trained dexterous craftsman may be utilised

by several schools on a pre-planned basis of organized time-table of instruction.

It will be seen that we have recommended seven groups of optional courses. Other groups may, of course, be added to the list. Ordinarily, however, these seven groups would provide enough scope for full freedom of choice to pupils with different interests and aptitudes. The State Departments of Education should examine the position in the light of their experiences and modify or add to these groups.

The other point regarding the curriculum recommended by us has to be noted. The differentiated curriculum will really begin in the second year though the selected craft will be taken up from the first year. One other subject may also be taken up in the first year for the sake of convenience. But we wish to emphasise the point that except in the case of languages, the optional subjects need not all be studied throughout the course. A particular subject may be covered in two years or in three years depending on the nature of the subject. For example, the course in shorthand and typewriting need not extend throughout the four school years. It may even be split up typewriting being taught in the first year and shorthand in the last two years.

We are aware that a new curriculum by itself, however good and carefully planned, cannot transform the educational system. Much will depend on the details of the curriculum and on the methods of handling it. What is really needed, is a new orientation and a new approach. Again, a curriculum cannot be regarded as fixed for all times—it should be a matter of constant experimentation with a view to revising it from time to time according to changing needs. The bounds of human knowledge are constantly expanding and, therefore, it is essential to go on examining and evaluating the contents of the curriculum, adding to it significant new items and weeding out from it whatever has ceased to have direct significance for the pupil and his immediate and future life. Therefore, as we have suggested elsewhere, there is an urgent need for curricular research in our country. We hope that its importance will be clearly realised and arrangements made for it in the Training Colleges.

While discussing the basic principles of curriculum construction, we have already indicated the nature of this new approach in earlier part of this chapter. We have also touched briefly on physical education, and art and craft teaching. It is really necessary to define this new approach with reference to every subject in the curriculum. It would however, suffice for our purpose if we do so with reference to three of the most important core subjects—languages, social studies and general science and briefly indicate what we expect from the teaching of these subjects at this stage.

We would like to make it clear that it is not the nomenclature or the combination of subjects that matters in the curriculum but their actual contents. Otherwise, the subjects that we have suggested do not differ markedly from those that are being taught in many secondary schools at present. We have to be clear about the objectives that are aimed at, the values that are expected to be derived by the pupil and the scope to be covered. So far as the scope is concerned, all that we need say is that the attempt should not be to crowd as much matter as possible into each subject but to pick out the most significant elements, which are relevant to the age and the needs of the students. It is far more useful from the educational point of view to understand and grasp thoroughly comparatively light subject-matter than to study a heavy syllabus in a mechanical or superficial manner. In connection with the curricular research that we have recommended, we would like specially to stress the importance of scrutinising the detailed syllabus in each subject to eliminate unnecessary and irrelevant items of information. We can only elucidate the principles here and not work out detailed syllabuses. Our educational authorities, who prescribe the courses, and our teachers who teach them need to understand clearly the aims and objects they should keep in view in the various subjects. We shall state them here very briefly and suggestively with reference to Languages, Social Studies and General Science.

Languages

Amongst languages, the highest importance is to be given to the mother-tongue. This sounds like a platitude but is unfortunately not so ; for in the past, far more importance and time have been given to other languages. Any teacher, however, poorly qualified, has been considered good enough to teach the mother-tongue and, for long, even the grades and salaries of language teachers have been lower than those of other teachers. Learning the mother-tongue does not imply merely the capacity to read and write it anyhow and a continuous addition to the student's vocabulary. It is a most potent and comprehensive medium for the education of the student's entire personality. Through it a good teacher can train his pupils in clear thinking, which is one of the most important objectives of education, and in lucid, felicitous self expression, which besides being a great social gift is an essential quality for successful democratic citizenship ; he can also build up literary appreciation and good taste and educate the emotions. Literature is a vehicle for training the character and inculcating the right sense of values through the study of literary masterpieces and communion with the spirit of great writers. It also provides a useful insight into the mind and the culture of the past. But all these objectives can only be attained if the emphasis is placed on the right things—self-expression in reading, writing and speech ; study and appreciation of

literature as a mirror to life ; reading of suitable general books of high quality with interest rather than concentration on textbooks ; approach to literature as a source of joy and inspiration rather than a kill-joy drill in grammar and vocabulary. If well qualified and well trained teachers can take up the teaching of the mother-tongue in this spirit, it may well raise the whole level and quality of education.

In the case of the other languages—whether English or classical or modern Indian languages—the approach must be definitely practical. The students should be able to read them with comprehension and ease, speak them correctly so as to make themselves understood and express simple ideas and give easy descriptions in writing. The emphasis must, therefore, be on reading and speech throughout and the students should not be tied down to prescribed textbooks. The preparation of easy books for general reading, whose vocabulary range is approximately the same as that of the textbooks, is an important matter requiring the attention of all educational authorities. If, at this stage, foundations are laid for reading with comprehension, interest will carry the student, in later life, as far as he cares to go. But the adoption of very ambitious aims at this stage e.g. literary appreciation, study of difficult poems, writing on abstract themes, will defeat the very purpose in view.

Social Studies

"Social Studies" as a term is comparatively new in Indian education ; it is meant to cover the ground traditionally associated with History, Geography, Economics, Civics etc. If the teaching of these separate subjects only imparts miscellaneous and unrelated information and does not throw any light on, or provide insight into social conditions and problems or create the desire to improve the existing state of things, their educative significance will be negligible. This whole group of studies has, therefore, to be viewed as a compact whole whose object is to adjust the students to their social environment—which includes the family, community, State and Nation—so that they may be able to understand how society has come to its present form and interpret intelligently the matrix of social forces and movements in the midst of which they are living. They help the student to discover and explain how this adjustment has taken place in the past and how it is taking place today. Through them, the students should be able to acquire not only the knowledge but attitudes and values which are essential for successful group living and civic efficiency. They should endeavour to give the students not only a sense of national patriotism and an appreciation of national heritage, but also a keen and lively sense of world unity and world citizenship. We need hardly state the obvious fact that these are but the formulation of the aims which have to be achieved ; their translation into curricular terms will require careful thought and patient

research. In the chapter on 'Methods', we have said something but a *how* the various topics should be presented in the form of units and projects etc.

General Science

An understanding and appreciation of the fundamental principles of the natural and physical sciences is essential to effective living in the world of today. The common need of middle school student in this field can be met best by formulating "general courses", with emphasis on practical applications and observations. At the High School stage there will be a specialised reorientation of the science courses and Physics, Chemistry and Biology will be taught as independent subjects. But, both from the point of view of students' adjustment to their natural environment and of providing the proper background for the more specialized studies later, it is desirable to formulate "general science" courses for the middle stage. It is to be noted that the science syllabus in the secondary school is not directed to the "production of scientists". Its aim is to give basic understanding and appreciation of scientific phenomena—biological and physical—which may prepare the "non-scientist" for a fuller and more complete life. At the same time, the courses should give fundamental principles to those relatively few who will later specialize in science. Special emphasis must be placed on demonstrations, field trips, and practical projects which may link up school science with actual life problems and situations—concrete problems like local sanitation, water supply, elimination of posts, etc. Science teaching at this stage, should initiate the student into the use and appreciation of the scientific method by which facts are discovered, relationships established, and sound conclusions reached. Pupils should be encouraged to explore every opportunity to develop the attitude of critical enquiry. The classroom, the home, the city and the village, the fields and woods and streams, all offer rich resources and opportunities for science teaching—resources that must be fully utilized by every teacher of science.

The teacher should aim at awakening in the pupils a lively curiosity about the natural phenomena around them, at developing their capacity for the practical application of their knowledge, at appreciating the tremendous impact of modern science on all aspects of our life and at interesting them in the human side of scientific progress by introducing them to the lives of the great scientists. Such an approach will ensure that science becomes a part of "liberal" education and an instrument for the appreciation of the special characteristics of modern culture.

We cherish the hope that, if the curriculum is reorganized on the lines suggested and if the new dynamic approach is adopted, the secondary school may become a centre of joyous education related to life, instead of being merely a centre of dull and stereotyped instruction.

II

TEXTBOOKS FOR SECONDARY SCHOOLS

The bulk of the evidence that was tendered, particularly by teachers in schools and colleges, indicated that there was a great deterioration in the standard of textbooks at present prescribed to the students. It was pointed out by some that the change-over to the regional language as the medium of instruction in the different States had led to and aggravation of the problem. Grave though the defects were in the use of a foreign language as the medium of instruction at the school stage, there was one relieving feature in regard to the selection of textbooks. These textbooks were prepared by authors in different parts of India. They had to compete with similar publications from other parts of the world if they were to be adopted as suitable. Considerable care was, therefore, taken in their preparation; and the authors themselves were generally persons of standing. With the change-over to the regional language as the medium of instruction, there was no longer a possibility of books being published on an all-India basis and authors were limited to the regions concerned. The restrictive nature of the open competition and the need for immediate provision of some kind of textbook or other led to a haphazard selection of books and to a considerable deterioration in the standard of the textbooks that were prescribed or recommended. Not every teacher in a region was competent to write textbooks in that particular regional language. Textbooks could seldom be written by the best qualified and most competent teachers because of their ignorance or insufficient knowledge of the regional language.

Apart from these difficulties, inevitable in the transitional period, we have reason to criticise the selection even of those books that are available in the market. Some complaints we have received may not be altogether justified, and we realise that opinions may vary widely as to the suitability of a book. The impression left on us after carefully sifting the evidence tendered was that, in prescribing textbooks considerations other than academic were not frequently brought to bear ; nor could it be asserted that the Textbook Committees had been functioning efficiently. Instances were brought to our notice where textbooks prescribed for a particular grade were either too difficult or too easy or they were very defective in the language in which they were written and in the manner in which the subject was presented.

The question therefore of producing proper textbooks for schools is one which should receive the earnest attention of both the State and Central Governments. It is interesting to note that as far back as 1873, a Resolution was passed by the Government of India requesting local Governments to appoint Committees for the examination of existing school books in order to discover defects of either form or substance and to bring them into harmony with the principles enunciated in the Resolution.

Among the principles laid down were—

(i) that a Standing Committee of reference should be appointed in each Province to choose or if necessary to prepare appropriate textbooks in the Indian languages and that the Committees so constituted should draw up a list of suitable books that could be adopted by the different schools concerned;

(ii) that where no suitable textbooks existed in any particular subject, the Standing Committee should take steps to have such a work prepared.

At present there are Textbook Committees in different States, and these Committees are expected to review the books submitted to them by publishers and recommend textbooks in the various subjects that might be studied by pupils in different standards.

Standards in the Production of Textbooks

We are greatly dissatisfied with the present standard of production of school books and consider it essential that this should be radically improved. Most of the books submitted and prescribed are poor specimen in every way—the paper is usually bad, the printing is unsatisfactory, the illustrations are poor and there are numerous printing mistakes. If such books are placed in the hands of students, it is idle to expect that they would acquire any love for books or feel interest in them or experience the joy that comes from handling an attractively produced publication. So far, this matter has been left entirely to commercial publishers who have failed to bring about any appreciable improvement. We are convinced that this state of things will continue unless the Education Departments take a direct interest in it. In our opinion, some of the textbooks should be published directly under the auspices of the Textbook Committees. We would like these books to set up, for the emulation of the publishers, a higher standard of production in every respect. In many ways, the difference between a well produced and a badly produced book is a matter of good taste and carefully designing and it does not always involve an appreciable increase of expenditure. When books are to be printed in very large numbers, it should be possible to obtain the services of competent persons to ensure good layout and design. So far as illustrations are concerned, their present standard and quality are almost a scandal and it is necessary that both the Central and State Governments should take a direct interest in their improvement. We would like to make two definite recommendations in this behalf. The Central Government should either set up a new institution or help an existing Art School to develop a special course—to train promising artists in the techniques of books illustrations. There is no justification for the complacent belief that any drawing master or artist

can prepare suitable illustrations for books. It requires a special flair and technique for which special training is necessary. Secondly, we recommend that the Central Government and if possible the State Governments also, should build up and maintain a library of books of good illustrations which could be sent out not only to Textbook Committees but also to publishers. This would reduce considerably the cost of production and consequently the price of books also. We recommend that the Textbook Committees should lay down definite and clear criteria for the paper, type, illustrations and the format of the books for various classes and they should unhesitatingly reject those which do not conform to the specified criteria.

Role of Publishers in the Publication of Text books

It was brought to our notice in this connection that the commercial side of the production of textbooks has also adversely affected their proper selection. The practice in some States is to prescribe only one textbook in each subject for each class. In view of the very large number of pupils studying in these forms, the approval of a book by the Committee meant large profits to the publishers and the financial stakes involved sometimes resulted in undue influences being brought to bear on the members of the Committees. Evidence tendered left no doubt that such influences did interfere with proper selection of textbooks. As a result of this, textbooks were often prescribed which were too difficult or to easy for the class concerned or were defective in language and in the manner of presentation and sometimes abounded in factual mistakes. The evil has become so widespread that it is necessary, in our opinion, to take effective steps to check this state of affairs and to exercise strict control to ensure the production and selection of better books. If proper books are to be produced and authors of repute are to write them, a different approach to the whole problem is urgently needed.

We are of the opinion that it is desirable to modify the rigid dependence of education on certain prescribed textbooks, and, therefore, we recommend that textbooks should not be prescribed for every subject. In the case of languages, it seems desirable to prescribe definite textbooks for each class in order to ensure proper gradation. So far as the other subjects are concerned, the Textbooks Committee should approve a number of suitable books in each subject and leave the choice to the institutions concerned. It has also been brought to our notice that some of the books prescribed have offended the religious or social susceptibilities of sections of the community or have tried to indoctrine the minds of the young students with particular political or religious ideologies. Fortunately this tendency is not very marked at present but, in view of our democratic, secular constitution, it is necessary to curb it wherever it is in evidence. Text book Committees

should, therefore, examine the books not only from the academic point of view but also with reference to certain important general principles which have a far-reaching bearing on their usefulness and suitability. No book should be approved which offends the religious sentiments of any section of the community, or to bring into contempt any reasonable social practice and custom. They should not create any feeling of bitterness or discord among the different sections of the people. Nor should they be utilised for propaganda of any particular political ideology or attempt to indoctrinate the young minds with particular political theories, except insofar as sound principles of the democratic way of living and the democratic form of Government, which the country has accepted, are brought home to the pupils. Not only should text-books exclude any matter which may have these undesirable reactions, but they should make a positive attempt to promote social, communal and international harmony so that the youths may be trained to become good citizens of their country as well as good citizens of the world.

Constitution of a High Power Committee

Having stated the general principles, we may now pass on to the machinery that should be entrusted with this task. We are of opinion that all political and other extraneous influences must be eschewed in the selection of text books. This is possible only if a High Power Committee is entrusted with this task. Such a Committee should function as an independent body. It should be composed of 7 members who will be chosen with particular reference to their high status, knowledge and experience. The Committee we envisage will consist of (1) a high dignitary of the judiciary of the State, preferably a judge of the High Court ; (2) a member of the Public Service Commission of the region concerned ; (3) a Vice-Chancellor of the region concerned ; (4) a headmaster or headmistress in the State ; (5) two distinguished educationists to be co-opted by the members ; and (6) Director of Education.

The Director of Education should be the Secretary of the Committee and the Committee may elect its own Chairman. The membership of the Committee should be for a period of five years. The Government of the State concerned may nominate those members where necessary.

Functions of the Committee

The Committee should have the following functions :—

(1) To prepare a panel of expert reviewers for each of the subjects included in the secondary school education curriculum.

(2) To appoint Expert Committees from time to time consisting of two or three members to give detailed reports on the suitability of the books referred to them. They should be paid a suitable honorarium.

(3) To invite experts to write textbooks and other books for study, if necessary.

(4) To cooperate with similar committees in other State wherever possible so as to select suitable books in the languages concerned on a regional basis.

(5) To arrange for the publication of textbooks and other books needed for the schools.

(6) To maintain a fund from the amount realised from the sale of publications.

(7) To grant suitable honoraria to authors or royalties to publishers whose books are approved as books of study for the schools.

(8) To utilise the balance of the fund for purposes such as :

(*a*) awarding of Scholarships to poor and deserving candidates,

(*b*) providing necessary books for such pupils,

(*c*) contributing towards the cost of the supply of milk, mid-day meals and evening refreshments to school children, and

(*d*) generally for such other purposes as are conducive to the improvement of secondary education.

The Committee should submit a report at the end of every year to the Government on its working. The Committee will have its own office, the expenditure of the office being borne out of the funds referred to above.

In suggesting that this Committee should undertake the publication of certain books, we shall not be restricting the choice of books nor limiting the scope of free enterprise in the publication of books. Even now many Universities publish textbooks in the languages after paying honoraria to the authors and royalties where necessary. The funds accruing therefrom have afforded substantial help to Universities to develop some of their activities in the research department.

Books of Reference in Regional Languages

We have referred elsewhere to the great paucity of books of reference in the regional languages for school libraries. We feel that unless active attempts are made to bring out a number of such publications as well as books in the regional languages and in the official language of the Union, the all round development of the pupil will be seriously handicapped. Teachers also should have more books available to them in the languages so that they may with profit refer to them and keep their knowledge up-to-date.

Reference may, in this connection, be made to the frequent change of textbooks in the schools. We find no justification for such quick changes. Besides imposing an unnecessary financial burden, which is becoming unbearable even for middle class parents, such frequent changes are not in the best interests of education. If a book has been carefully chosen, there is no reason why it should not be used for a resonable length of time. Moreover, the possibility of such changes leads to unfair competition amongst publishers who seek by all means to get their books approved irrespective of quality. Similarly, it is necessary to take care that too many books are not placed on the approved list—as is the practice in some States—because that tends unconsciously to lower their quality. If the list of approved books in a particular subject is limited, there will be an incentive on the part of authors and publishers to produce better books. Otherwise, if there are as many as twenty or thirty books on the approved list, it is impossible to maintain a high standard. We depreciate also the growing practice in many schools, particularly in the richer schools, of making the student spend extravagantly on exercise books and stationery. Apart from the heavy burden for their parents, it gives them a wrong kind of social and economic training which is objectionable from many points of view.

SUMMARY OF RECOMMENDATIONS

Curriculum—

1. At the Middle School stage, the curriculum should include (i) Languages ; (ii) Social Studies ; (iii) General Science ; (iv) Mathematics ; (v) Art and Music ; (vi) Craft ; and (vii) Physical Education.

2. At the High School or Higher Secondary stage, diversified courses of instruction should be provided for the pupils.

3. A certain number of core subjects should be common to all students whatever the diversified courses of study that they may take ; these should consist of (i) Languages, (ii) General Science, (iii) Social Studies, and (iv) a craft.

4. Diversified courses of study should include the following seven groups : (i) Humanities, (ii) Sciences, (iii) Technical Subjects, (iv) Commercial subjects, (v) Agricultural subjects, (vi) Fine Arts, and (vii) Home Sciences ; as and when necessary additional diversified courses may be added.

5. The diversified curriculum should begin in the second year of the High School or Higher Secondary School stage.

Textbooks—

6. With a view to improving the quality of textbooks prescribed, a high power Textbook Committee should be constituted which should consist of a high dignitary of the judiciary of the State, preferably a Judge of the High Court, a Member of the Public Service Commission of the region concerned, a Vice-Chancellor of the region, a headmaster or headmistress in the State, two distinguished educationists and the Director of Education ; this Committee should function as an independent body.

7. A fund should be maintained from the amount realised from the sale of publications which may be utilised for awarding scholarships, and providing books and certain other amenities for school children.

8. The Textbook Committee should lay down clear criteria for the type of paper illustration, printing and format of the book.

9. The Central Government should set up a new institution, or help some existing Art schools to develop training in the technique of book illustration,

10. The Central and State Governments should maintain libraries of blocks of good illustrations which could be loaned to Textbook Committees and publisher in order to improve the standard of book illustration.

11. Single textbook should not be prescribed for every subject of study, but a reasonable number of books which satisfy the standards laid down should be recommended leaving the choice to the schools concerned.

12. In the case of languages, however, definite textbooks should be prescribed for each class to ensure proper gradation,

13. No book prescribed as a textbook or as a book for general study should contain any passage or statement which might offend the religious or social susceptibilities of any section of the community or might indoctrinate the minds of the young student with particular political or religious ideologies.

14. Frequent changes in textbooks and books prescribed for study should be discouraged.

CHAPTER VII

DYNAMIC METHODS OF TEACHING

I

Need for Right Methods

We have discussed the question of the reconstruction of the curriculum in the preceding chapter. But every teacher and educationist of experience knows that even the best curriculum and the most perfect syllabus remain dead unless quickened into life by the right methods of teaching and the right kind of teachers. Sometimes even an unsatisfactory and unimaginative syllabus can be made interesting and significant by the gifted teacher who does not focus his mind on the subject-matter to be taught or the information to be imparted but on his students —their interests and aptitudes, their reactions and response. He judges the success of his lesson not by the amount of matter covered but by the understanding, the appreciation and the efficiency achieved by the students. In building up, therefore, a picture of the reorganized secondary school, it is necessary to indicate the kind of methods to be adopted and popularized if the curriculum that we have recommended is to develop into the kind of educational medium that we envisage. It is really the function of Training Colleges to introduce these methods in our schools through their trained teachers and we do not propose to cover here the ground that training courses are expected to do. We shall confine our attention to the most outstanding defects in this field and to indicate the general principles and approach to be adopted to eradicate these defects.

Objectives of Right Methods

In discussing the problem of right methods, it is necessary to take a broad and comprehensive view of their *objectives* which are really closely related to the objectives of education that we have already discussed and which we must to some extent recapitulate from the point of view of methodology. A method is not merely a device adopted for communicating certain items of information to students and exclusively the concern of the teacher, who is supposed to be at the "giving end." Any method, good or bad, links up the teacher and his pupils into an organic relationship with constant mutual interaction ; it reacts not only on the *mind* of the students but on their entire personality, their standards of work and judgment, their intellectual and emotional equipment, their attitudes and values. Good methods which are psychologically and socially sound may raise the *whole* quality of their life ; bad methods may

debase it. So, in the choice and assessment of methods, teachers must always take into consideration their *end-products*—namely, the attitudes and values inclucated in them consciously or unconsciously. Good methods of teaching should aim at the following objectives, which have not only intellectual but also social and moral implications for, in the domain of education, it is impossible to draw rigid lines of demarcation. Whatever impact education has on one aspect of the personality tends to react on other aspects.

The highest value that all methods should try to inculcate is *love of work* and the desire to do it with the highest measure of efficiency of which one is capable. There are only two real educative media, contact with a rich and well integrated human personality (whether of the teacher or the parents or personal friends) and sincere, wholehearted preoccupation with worthwhile *work*, intellectual as well as practical. If education fails to develop in the students a real attachment to the work that they are doing in school and the will to put the best of themselves into it, it can neither educate the mind nor train the character. For various reasons, which we need not analyse here, this attitude to work is not common amongst our students—either in schools or in colleges. According to our evidence they are content with the minimum of effort, slipshod in their work, and tend to confine themselves to the study of "Notes" and "Summaries" rather than textbooks, and to textbooks rather than significant books of wider interest. The secondary school can render no greater service to the students (and ultimately to the nation) than by raising their standards of efficiency in every thing and creating the necessary attitude for the purpose. The motto of every school and its pupils should be "Everything that is worth doing at all is worth doing well"—whether it be making a speech, writing a composition, drawing a map, cleaning the classroom making a book rack or forming a queue. From this point of view, it is more valuable to take up fewer projects and to complete them with thoroughness and efficiency than to attempt a larger number haphazardly and superficially. In this connection, it is well to remember that good work, habits, and skill are not acquired theoretically or in a vacuum ; it is proper habits of work and insistence on them in every detail and over a long period of time that create the requisite attitudes and values. Discipline or co-operation for instance, cannot be instilled into students through lectures or exhortations ; they can become a part of an individual's normal technique of life only when he has been given numerous opportunities of participating in freely accepted projects and activities in which discipline and co-operation are constantly in demand for achieving the ends in view

Another serious defect which vitiates present day teaching is its excessive domination by *verbalism* i.e. the tendency to identify knowledge with words, the delusion that if a student is able to memorize or repeat

certain words or phrases he has grasped the facts or the ideas that they are meant to convey. The use of an imperfectly understood foreign language as medium of instruction has greatly accentuated this evil and students have usually been content, or compelled, to *memorize* whole paragraphs or pages from their textbooks in History, Geography and even in Science and Mathematics. In spite of the change in the medium of instruction in recent years, we are afraid there has not been much improvement in this situation. The strangle-hold of verbalism is still confused with the grasp of knowledge—knowledge, which is the fruit of personal effort and purposeful intellectual and practical activity. Consequently many students leave school with a certain amount of information as their equipment but neither well assimilated knowledge nor wisdom, which is the grace of knowledge. We felt strongly, therefore, that only such methods should be adopted as will give concreteness and reality to learning and help to break down the barriers between life and learning and between the school and the community. We shall have something to say later about the nature of such methods.

On the intellectual side the most important objective of teaching methods should be to develop the capacity for *clear thinking* which distinguishes every truly educated person and has become increasingly important in the modern world of "plural possibilities", where every one must learn to make up his mind and judge issues and problems without prejudice or passion. A majority of our citizens will not receive any education beyond the secondary stage and if they cannot learn to think straight and dispassionately at this stage, they will never be able to play their part as responsible citizens of a democracy. Some of the objective to which we have referred above will, if achieved, assist in training students in this valuable capacity. But that is not enough. It must also form the conscious objective of every single teacher, no matter what subject he is entrusted with. Whether a student is asked to make a speech in a debating society or to write an essay or to answer a question in history, geography, or science or to perform an experiment, the accent should always be on clear thinking and on lucid expression which is a mirror of clear thought. All students cannot become eloquent speakers or good stylists but there is no reason why—if proper methods are adopted—every normal student should not able to learn to speak and write in such a way as to convey his ideas lucidly and intelligibly. In this connection we would like to discourage the present practice of giving excessive home work. It is not only a great burden on the children but is likely to be a threat to their health and a hindrance to the development of proper habits of work. Whatever home work is given—and we are of the opinion that this should be confined to the higher classes—should be carefully and scrupulously corrected and the mistakes discussed with the students so that their confusions of thought and expression may

be gradually eliminated. When a great deal of home work is given and it is not properly scrutinized by the teacher, the mistakes of spelling of grammar, of expression, of involved presentation and, above all, of confused thinking remain undetected and are likely to become ingrained. That is why a little home work, well and willingly done and carefully corrected, is for better than great deal of slipshod work, reluctantly accomplished. Here as elsewhere, quality is more important than quantity. This does not, of course, mean that children will do no study at home. If interest has been aroused and reading habits have been cultivated, they will read many books of general interest, they will pursue their various hobbies, they may prepare charts, models, diagrams, or preform simple experiments and study their textbooks in various subjects. But the difference is that all this will be work, spontaneously undertaken and stemming from the student's natural interest, not imposed on them from outside.

Finally, it is desirable that the methods of teaching should expand the range of students' interest. A cultured man is a person of varied interests and, if healthy interests are fostered, they will enrich the personality. The normal adolescent is naturally interested in many things and, in the class-room, on the play-ground, during excursions and in their social and extra-curricular activities the intelligent and wide awake teacher has numerous opportunities to kindle new interest, to expand and strengthen existing ones and to satisfy their innate desire to touch life at many points. It is by exploring different avenues of interests and activities that he can truely discover himself and begin to specialize in due course. We would urge all schools to provide in the time-table, at least one free period every day in which students may pursue their favourite hobbies and creative activities individually or in groups. preferably under the guidance of some interested teacher. We need hardly add that the success of this proposal would largely depend on the requisite accommodation and equipment being available for the purpose.

Value of Activity Methods

Our own observation of many schools-at-work as well as the evidence given by experienced educationists lead us irresistibly to the conclusion that the methods of teaching in use are still dominated by routine. There is still too much of cramming and the teaching in the school is not related to life, nor is there any determined attempt to back deterioration of standards of expression in speech and writing. The point of departure for all reforms in method must be the realization that knowledge has to be actively acquired by every individual student through independent effort. The basis of teaching must, therefore, be the organization of the subject-matter into units or projects which would create opportunities for self-activity on the part of the students. These

should largely replace the formal lessons which often lack proper motivation and, therefore, fail to arouse real interest. Students can put in their best effort only when the relationship between their life and their lessons is made manifest, for this will create the necessary feeling of interest and provide the requisite motivation. So the business of the teacher should be to re-establish the link between life and knowledge, to share the aims and objects of teaching with his pupils and to plan the programme of work in such a way that pupils will have varied and ample opportunities for self-expression in speech, writing, collective reading, independent research, donstructive activities and other projects that bring the hand and the mind into fruitful co-operation. Such a conception of the school day programme is far removed from the stereotyped routine of the present day in which verbalism predominates—the teacher taking and dictating notes and the children listening passively in the class-room and memorizing things at home for the sake of passing tests and examinations. There is no opportunity or desire to acquire knowledge either for the sake of life or for its own sake – the dominant motive is to scarp through the examination. If the self-activity approach is adopted, if there is imagination in planning work and freedom in its execution, the present bookish schools can be transformed into "work schools" or "activity schools" and they can become genuine centres of education for the whole personality of the child. This approach also postulates that practical and productive work should find a prominent and honoured place in the school programme. We have already provided for it in the *curriculum but* what we are concerned with here is the Principle that the *teaching methods* in all subjects should be inspired, as far as possible, with the spirit underlying good craft work. This implies that, in the teaching of every subject, opportunities should be afforded for pupils to apply practically the knowledge that has been acquired by them. In Geography it may take the form of drawing maps, making models, illustrations, organising excursions. keeping weather records, constructing in appropriate material scenes from the life of different regions of the world etc. In History, in addition to the preparation of suitable illustrations of the type mentioned above, they may prepare and stage historical plays---making the costumes, the stage effects, fixing the lights etc., themselves or co-operatively study local history or set up a small history museum and, in fact, take up any projects that will bring history to life. In connection with the study of languages---particularly the mother-tongue-they may undertake to write small booklets on subjects of special interest to them. The collection of material from relevant sources, its editing its actual writing, the binding of the booklets attractively will all form part of a joyous project. Illustrated charts about great writers may be prepared---containing their pictures, short notes on their life and works and brief appropriate quotations in prose or poetry from their writings—or they may possibly attempt translations of some easy books and articles in English with the object of providing rich reading material for their

fellow students in the Library. The school magazine is another project which can become the nucleus not only of creative writing but of a number of academic and practical activities which may widen the interests and quicken the whole intellectual pace of the group of students concerned—provided, of course, it is not organised as a compulsory task imposed on the students from above but it is envisaged as a creative activity initiated and directed by them spontaneously and with zest.

There is another important principle which may be borne in mind by the teacher in planning his methods of teaching. It is not the amount of knowledge imparted or learnt in class that matters but the efficiency and thoroughness with which it is acquired by the students. With the great increase in knowledge that has taken place in every single field, it is quite impossible for a student—not only in the secondary school but even in the University—to acquire even one-hundredth of the most essential knowledge in any particular field of studies. Any attempt, therefore, at an encyclopaedic approach, however watered down, is foredoomed to failure. The teacher must concentrate on two things—quickening of interest and training in efficient techniques of learning and study. If, through proper presentation and the realisation of the relationship between the student's life and what he is learning at school, his curiosity and interest have been aroused, he will always be able to acquire necessary knowledge, on the spur of felt need, in his later life. On the other hand, the static, ready-made knowledge, which is forced on him, not only fails to irradiate his mind but is also quickly forgotten—as soon as it has been unburdened in the Examination Hall !

The emphasis therefore shifts from tne quantum of knowledge to the right methods of acquiring it. For this purpose, it is essential that every student should be trained in the art of study. We consider this absolutely essential and wish to stress it in particular because, in a large majority of schools, no attempt is made to train students in this basic skill. It seems to be presumed that any one who can read a book, in the sense of passing his eyes over words or pronouncing them with his lips, has *studied* it. This is an untenable presumption. Study implies several mental processes—interpretation of words into their appropriate meanings, the art of building up ideas, and sifting the significant from unimportant detail or illustration or from incompetent "padding". These study skills cannot be acquired automatically but have to be consciously practiced. It is not necessary for us to discuss the methods that should be adopted for this purpose and for assessing whether the students have acquired the habits and capacities needed for intelligent study. But we do feel that, with reference to *every* subject of the curriculum, the teaching of appropriate methods of study must from an important part of the school programme. One approach which has been successfully tried in

some schools, is to organize, at the beginning of the session, a "How to study week" in which all the pupils concentrate on this problem, are made conscious of it and are initiated into proper methods of study. But obviously this can only be useful if care is taken to see that the habits, skills and attitudes acquired during this intensive training are used through the year and if every teacher co-operates in this project. One essential part of this programme must be a training in the use of reference materials such as the list of contents and index in books, the dictionary, the atlas and reference books like the Encyclopaedia or the Book of Knowledge.

Adaptation of Methods to Suit Different Levels of Intelligence

Having stressed the value of *activity methods*, we should like also to put in a plea for individualized work and instruction, in order to train the students in the habit of working independently. If students are trained to do so, it will discourage cramming and make it necessary for the teacher to cover the entire course or teach the whole book through formal oral lessons. He could then concentrate on the essentials show the inter-connections of topics and arouse intelligent interest leaving some parts of the course to be studied by the students independently. These will always be certain types of assignments in the school programme which can be best carried out on the basis of individual activity. Such training is necessary not only to develop their capacity for independent work but also to adapt instruction to individual differences. These differences are a most significant part of the psychological data with which the teacher has to deal and, if he fails to adapt his methods of work and presentation to the psychological needs and mental range of different types of children, he can neither win their interest nor their active co-operation. The present practice of mechanically applying the same methods to dull, average, as well as bright children is responsible for much of the ineffectiveness of the instruction given in schools. If these various groups of children are allowed to proceed at their own appropriate pace and the method-approach as well as the curricular load are properly adjusted, it will be good for all of them—it will save the dull children from discouragement and the bright children from a sense of frustration. We commend for consideration in this connection a scheme that has been tried in schools in the United Kingdom. The curriculum is arranged in "three streams", A, B and C. For the dull children, the curriculum as well as the syllabus in each subject are simpler and lighter—that is the C stream—and include only the minimum essential subject-matter. If they can complete that with thoroughness and efficiency they will gain more intellectually than if they were dragged behind the chariot wheels of their bright colleagues. For the bright students the curriculum has richer content and, after they have completed the common basic contents, they can go on to study the additional subject matter. We have not considered

it necessary to work out the curriculum or the syllabuses on these lines, because it will have to be done by State Departments of Education and, to some extent, by each individual school according to circumstances. But we recommend that this idea of adjusting the curriculum to students of varying ability should be explored and, what is equally important, methods of teaching should also be similarly adjusted. The brighter children will, for example, be able to respond better to methods involving greater freedom, initiative and individual responsibility than the dull or the average children who may require, at least in the early stages, a greater measure of planning and guidance, by the teachers.

Balancing Individual and Group Work

A wise teacher, must, however, balance the claims of individual work with co-operative or group work. In actual life it is just as important to possess qualities of good tempered co-operation, discipline and leadership as to have the capacity for personal initiative and independent work. The former qualities develop best in the context of well-organised group work which is not at present given its due plan in our schools. The normal basis of work in a large majority of schools is competition—competition for marks and grades and prizes. This has its uses within limits but does not by any means provide the proper training for the art of living in the community. The genuine training of emotions, attitudes, and social capacities takes place best in the context of projects and units of work undertaken co-operatively. It is the give-and-take of shared experiences that brings out the quality of leadership, inculcates habits of disciplined work and takes the individual out of his potentially dangerous mental and emotional isolation. We recommend, therefore, that teachers should be so trained that they are able to visualise and organise at least a part of the curriculum in the form of projects and activity—units which groups of students may take up and carry to completion. Another advantage of such projects would be that they will break through the academic isolation of the school and bring it into vital *rapport* with the life and the activity of the surrounding community. The chemistry of purification of water may blossom into the study of the municipal water system ; the lesson in Civics may lead to a study of the working of the Local Board or a compaign for the improvement of local sanitary conditions. In fact there are numerous resources in the life of every community which can, and should, be utilised for educational purposes. Such an approach will vitalise the school and also help to improve the conditions obtaining in the community. We would like to refer in this connection to a significant educational movement that is under way in the United States under the name of *Learning by living*, the object of which is to link the school and the community into a mutually enriching unity.

II

THE PLACE OF THE LIBRARY IN SCHOOLS

We have referred in an earlier part of the chapter to the importance of cultivating the habits of general reading, of reducing the stress placed on textbooks and making increasing use of the Library as a repository of reference books, standard books and books of general interest. A textbook usually adopts a specific approach conveying information and knowledge as systematically and briefly as possible. Such an approach has its own advantages but it cannot provide adequate training for the growing mind of the adolescent which often craves for a wider and more challenging presentation and appreciates contact with more creative minds than textbook writers are generally gifted with. Moreover, the standard of interest and general knowledge is so deplorably poor in secondary schools—the examination "howlers" and the reports of Public Service Commissions are an irrefutable proof of the latter—that it has become a matter of the highest priority to promote the desire and the habit of general reading amongst our students. This means, in effect, the establishment of really good libraries in schools and the provision of an intelligent and effective Library Service. In fact, without it, many of the recommendations and proposals made in this chapter and elsewhere cannot possibly be implemented. Individual work, the pursuit of group projects, many academic hobbies and co-curricular activities postulate the existence of a good, efficiently functioning library. The library may well be regarded as an essential instrument for putting progressive methods into practice. In view of its crucial importance, we consider it necessary to devote some space to discussing how the school library must be organised if it is to play its part effectively in the improvement of secondary education. We should like to state at the outset that, in a large majority of schools, there are at present no libraries worth the name. The books are generally old, outdated, unsuitable, usually selected without reference to the students' tastes and interests. They are stocked in a few book-shelves, whieh are housed in an inadequate and unattractive room. The person in charge is often a clerk or an indifferent teacher who does this on a part-time basis and has neither a love for books nor knowledge of library technique. Naturally, therefore, there is nothing like an imaginative and well-planned library service which could inspire students to read and cultivate in them a sincere love of books. What makes this situation particularly difficult is the fact that most teachers and Headmasters and even the educational administrators and authorities do not realize how unsatisfactory this position is and, therefore, they have no sense of urgency in the matter. Is is, necessary, therefore, to give some idea of the Library as we conceive it.

In the first place, the library must be made the most attractive place in the school so that students will be naturally drawn to it. It should be housed in a spacious, well-lit hall (or room), with the walls suitably coloured and the rooms decorated with flowers and artistically framed pictures and prints of famous paintings. The furniture—book-shelves, tables, chairs, reading desks—should be carefully designed with an eye to artistic effect as well as functional efficiency. As far as possible, the open shelf system should be introduced so that students may have free access to books, may learn to handle them and browse on them at their leisure. In decorating the library, the full co-operation of the students should be obtained in order to give them the feeling that it is their *own* library.

Secondly, the success of the library depends largely on the proper selection of books, journals and periodicals. This should be the function of a small committee of teachers who have a genuine love for books, can study book reviews, consult catalogues and visit book shops, if possible. It would be useful if the same committee could be entrusted with the work of studying children's reading interests. Both in this work as well as in the choosing of books, some senior students who are interested in reading should be associated. They are, after all, the consumers and their co-operation is likely to be very enlightening. The guiding principle in selection should be not the teachers own idea of what books the students *must* read but their natural and psychological interests. If they feel more attracted, at a particular age, to stories of adventure or travel or biographies or even detection and crime, there is no justification for forcing them to read poetry or classics or belle-letters. Of course, the teacher's skill and teaching efficiency will consist in his being able to direct what they are reading now towards what they *should* be reading in due course. Literary education postulates the gradual elevation of taste and refining of appreciation but the teachers' tact will lie in not forcing them but in unobtrusively guiding them on the way. In this endeavour, his own example and courageous enthusiasm can prove very potent allies.

The library being attractively arranged and adequately supplied with suitable books, the next important thing is an efficient service. In most schools, as we have pointed out, there is no conception of such service. It would require the services of a highly qualified and trained librarian who would be on a par with other senior teachers in pay and status and we definitely recommend that there should be, in every secondary school, a full-time librarian of this type. If his function is merely to maintain a register of books, keep the library open at odd hours and occasionally issue books to a few students, there would obviously be no need for a full-time and highly qualified librarian. But if the library is to be the hub of the academic and intellectual life of the

school, if it is not only to meet but guide the reading interests of students, if it is to work as a centre of free and supervised study as well as group work on projects undertaken by them—if it is to do all these things, the librarian will surely have all his work cut out. He will also be responsible for giving due publicity to good books, old and new, available in the library—preparing and circulating book lists suitable for different grades, displaying 'blurbs' and cuttings of book reviews on the notice board, arranging book exhibitions, perhaps conducting a group reading project when a few students of similar interests may come together to read aloud poems, or stories or dramas. Above all, he will be available for consultation in the selection of suitable books for general reading or references needed for individual or group projects, that they have to work out as part of their curricular or co-curricular work. It will, of course, be necessary for him to have the assistance of all his colleagues in this work—and if in the Training Colleges some of them can be given a brief orientation and training in Library work, it will be a great advantage but he will have to act as the pivot and the inspiration of this intellectual and literary ferment.

In this connection, it is recommended that such of those teachers as have not had any training in library work during the period of study in Training Colleges should be given opportunitiesfor attending summer courses in librarianship for periods ranging from 4 to 8 weeks.

We have recommended that every secondary school should have a central library under a trained librarian. School buildings being what they are, it will be some time before provision could be made in every school for a big reading room and its adjuncts. Similarly it will take time to provide each school with a qualified and trained librarian Hence our recommendation for training some teachers in the management of school libraries as a part of their training course. These partially trained teacher librarians will, working in co-operation, gradually build up the central library and organise the library service, while, in the meantime working the class libraries. The class library is an important and essential adjunct to the central school library. It is easily organised and in the hands of a teacher of imagination it can do within its own limitations as much good work as the central library. The important point about the class library is to change and replenish its stocks at frequent intervals so that even within the four walls of class-room the children have a wide vatiety of intellectual fare spread before them. A wise class-teacher can use the class library effectively to develop correct reading habits and for various other educative purposes. In a way he is in a position of advantage as compared with other teachers and if he himself loves books he is sure to infect his children with his own love and enthusiasm.

Subject Libraries

Besides the class library in every High school there should be subject-libraries in charge of subject teachers. Competent subject teachers can enrich their teaching greatly with the help of small collections of books on their own subjects. These should not be confined to text-books only. Advanced works, reference books, books on related subjects and allied fields, all these will find a place in that collection, so that handling them and borrowing over them students get a wide view of the subjects in all its bearings. Nothing can be more inspiring than contact with a teacher who loves his own subject and who can present it in its proper prespective.

It is necessary for the headmasters and the teachers to keep their fingers, as it were, on the pulse of their students' general reading. At present, this is far from being the case and therefore—with the exception of the brightest students who may assume the initiative in consulting teachers about their reading—they do not receive any individual guidance in this behalf. Most teachers, in fact, have no idea of what a majority of students are reading or whether they are reading at all! This points to the need of maintaining proper records that can be easily and quickly scrutinised. We should like to make two recommendations in this connection. Where ordinary issue registers—rather than issue cards—are maintained, each student must be allotted a few pages of the register in which all books studied by him are entered date-wise so that the class teachers and headmaster may see at a glance what each individual has been reading and give him necessary advice and encouragement. Secondly, each student should be required to maintain a dairy in which he may enter, date-wise, the names of all the books (with the names of the authors) which he has read, together with brief quotations or extracts that may appeal to him. Perhaps at a later stage, he may write short reviews or appreciations of those books. Such a dairy, maintained throughout the school years, will provide a fascinating map of his intellectual development and literary growth which will not only be of value to him here and now but may be of interest even in later life.

We would like to make certain general suggestions in order to strengthen library facilities and to secure the maximum use of those that exist. In all public libraries there should be a section specially meant for children and adolescents which may supplement the resources of the local school libraries. Secondly, steps should be taken to keep the school library open during the vacation and long holidays for the benefit of the students as well as the local community, if possible. In places where there is no public library, the school should also consider the possibility of throwing the school library open to the public outside school hours. This may involve some extra expenditure but it would be eminently worthwhile because it will draw the school and the community into the

kind of partnership that we have advocated in this Report. We are also of the view that, in States where a library cess is levied, the proceeds should also be utilised to strengthen and improve school libraries. In smaller places it may be more economical to build up the school library in such a way that it may also serve the function of a Public Library for the locality, thus avoiding the duplication of buildings and furniture, and, to some extent, of staff.

In some cities we understand that during the vacation books of interest to suit different grades of students are collected from various school libraries and are placed in a central locality, the students being encouraged to visit such improvised libraries and to study whatever books they may be interested in. This is an interesting experiment that may be tried in large cities.

We may, in passing, make a reference here to the associated problem of the production of suitable books for children and abolescents. At present there is a great paucity of such books in practically all Indian languages and unless the Centre and the State Governments take well thought out measures to encourage the production of suitable books for general reading, the objective in view cannot be realized—books suitable not only from the point of view of contents but also of printing, binding and illustrations. This may be done by giving financial assistance to qualified and well established organizations engaged in the production of such books, by offering prizes to the best books published and by arranging translations of good children's books available in English or published in various regional languages. We believe that, if school libraries are better financed and are able to buy a larger number of books and if a love of reading is created in the students and eventually in adults with the increased purchase of books will be published.

We have advocated in the preceding paragraphs several new approaches to methods of teaching and described the part a well organized library can play in facilitating their implementation. But in the evidence and the memoranda that were tendered to us, it was repeatedly affirmed that it is very difficult to apply such progressive methods in schools. Obviously, if these ideas and suggestions are not translated into terms of curriculum and methods and the difficulties that stand in the way are not removed, Secondary education will make no headway. Some of these difficulties have to do with the general sense of frustration that unfortunately prevails amongst teachers. There is no enthusiasm, no creative urge to initiate an educational renaissance. We hope, however, that soon after the publication of this Report. the Centre and the State Governments will undertake to organize—for the discussion of all these problems—country-wide seminars, discussion groups and refresher courses for headmasters and teachers, conducted by educationists with vision. This

will help to reorient the teachers' minds and their way of thinking and create a new and bracing climate of opinion. If the improvement in the terms and conditions of service and the general social status of teachers that we have recommended elsewhere is brought about and a sense of contentment is created, we have no doubt that, as a result of these conferences, etc., the present feeling of frustation will disappear and the biggest hurdle in the way of educational reconstruction will be removed.

Another measure which will be very helpful in this connection is a systematic attempt on the part of all Education Departments, to prepare suitable literature, suggestive programmes, teaching aids, etc, for the guidance of teachers. At present they lack definite guidance. It is not provided by the stereotyped notes of Inspecting Officers, which can neither inspire creative thinking, nor stimulate new methods of work. The production of such material requires that there should be a small "educated wing" attached either to the office of the Director of Edcation or to one of the Post-Graduate Training Colleges, which will devote itself exclusively to the study of educational issues and problems, with special reference to the teachers' practical difficulties, and produce pamphlets, brochures, accounts of new educational experiments and movements for their use. These should be so written that they will keep their knowledge up-to-date, introduce them to good books, inspire them to try new and better methods of teaching and give them detailed and practical suggestions for the purpose. The department should also see to it that every Secondary school has a small but select library of educational books and periodicals for the teachers' use.

Sometimes even good teachers, with ideas and a sense of duty, are unable to put progressive educational methods into practice. Where this is not due to the uncongenial school atmosphere the reason may be either that the teachers have not been adequately trained in and given practical demonstration and observation of such methods or the pressure and dread of examinations may be cramping their efforts. So far as the first reason is concerned, it is a fact that even the demonstration schools attached to Training Colleges often fail to put into practice the ideas and theories advocated by thc College Professors. So the teachers come out of these institutions with rather vague ideas about things like 'activity methods', 'free work' and group projects etc., but they have never seen them at work. This difficulty can only be overcome if good demonstration and experimental schools are established and given all the necessary facilities, material and psychological, to develop better methods of teaching.

Experimental Schools

We should like to recommend in this connection a new experiment undertaken in one of the States, whereby a certain number of selected schools have been released from the usual Departmental regulations

about curricula, methods and textbooks and given the freedom to work on new experimental lines. If a few progressive schools are established in every State, where experienced teachers would be free to work out an improved syllabus and methods of teaching and discipline, they might, in due course, help to leaven the whole educational system. The Education Departments may also perhaps explore the possibility of short-term exchange of really gifted teachers from one school to another—particularly of teachers from such progressive schools who may be sent to other institutions. So far as the system of examination is concerned, we have made recommendations elsewhere which are calculated to minimise its dead-weight and to secure greater freedom for teachers.

We recommend that such experimental schools as are in existence or which may be established in future should receive due encouragement at the hands of the State and Central Governments.

III

Museums

Museums play a great part in the education of school children as they bring home to them much more vividly than any prosaic lectures the discoveries of the past and various developments that have taken place in many fields of Science and Technology. We have seen the great value that museums play in other countries and the great importance that is attached to visits by school children at periodical intervals to these museums. They can also supply a background of information in regard to history, art and other fields of learning.

At present there are (within our knowledge) no museums in India of the type that exist in some of the European and American cities. We believe it is necessary from the educational point of view to establish such museums in important centres at least, wherein both ancient and modern collections will be exhibited and in some cases even demonstrations given of the actual process of development of various scientific discoveries. Nothing can impress the students in the formative age so much as the actual visualising of these experiments in graphic manner. We have seen exhibitions conducted in various museums frome time to time and have been greatly impressed with their educational value. It will serve also to educate the public at large and to give them a realistic approach to scientific investigations and scientific discoveries. It will not be difficult for every State to concentrate on one such prominent Museum at least. While on this subject, we may also refer to the desirability of providing small museums in the schools themselves. It may even be possible to have a more comprehensive set up in the museum of a particular town to which all the schools can contribute and thus make it much more attractive to school childern and to the public. We feel that assistance from the Centre and the States should be forthcoming for the starting of such museums.

Audio-Visual Aids—Filmsand Radio

It is hardly necessary to emphasise the role that audio-visual aids, films and radio talks, can play in the liberalising of the education of the school children. In some States they have been developed to such an extent that most of the schools are able to obtain from the Department of Public Instruction the audia-visual aids and films and to correlate them with the particular subjects that are being taught. The students thus get not merely theoretical instruction but through these aids a graphic presentation of the subject. We recommend that a central library of educational films should be available in each State and that films of great value be sent from the Central Government to the States periodically. We recommend also that educational films suited to Indian conditions should be taken and made available to schools.

As regards the radio, we are glad to learn that through the All India Radio, arrangements have been made for school broadcasts. It is hardly necessary for us to emphasise that such broadcasts should be by well-qualified persons and should create an interest in the subject so that the boy's curiosity can be roused to learn more about the subject. Nothing is calculated to produce in the child an aversion for such broadcasts as the monotonous and none too graphic description that sometimes is given by persons not quite familiar with the psychology of the young mind. It should not be treated as a routine duty which can be discharged by any teacher in the area. Care must be taken to see that an expert panel of headmasters and teachers is constituted to decide on (a) the subject to be dealt with, (b) the manner in which it ought to be dealt with, and (c) persons competent to give such a talk. If school broadcasts are to be conducted on these lines, they will form a very efficient supplement to education.

We venture to hope that the adoption of the various suggestions that have been made as well as the practical measures that have been recommended will break through the vicious circle which holds our schools in its thrall and release forces which will eventually transform the educational system.

SUMMARY OF RECOMMENDATIONS

1. The methods of teaching in schools should aim not merely at the imparting of knowledge in an efficient manner, but also at inculcating desirable values and proper attitudes and habits of work in the students.

2. They should, in particular, endeavour to create in the students genuine attachment to work and a desire to do it as efficiently, honesly and thoroughly as possible,

3. The emphasis in teaching should shift from verbalism and memorization to learning through purposeful, concrete and realistic situations and, for this purpose, the principles of "Activity Method" and "Project Method" should be assimilated in school practice.

4. Teaching methods should provide opportunities for students to learn activity and to apply practically the knowledge that they have acquired in the class-room. "Expression Work" of different kinds must, therefore, form part of the programme in every school subject.

5. In the teaching of all subjects special stress should be placed on clear thinking and clear expression both in speech and writing.

6. Teaching methods should aim less at imparting the maximum quantum of knowledge possible and more on training students in the techniques of study and methods of acquiring knowledge through personal effort and initiative.

7. A well-thought out attempt should be made to adopt methods of instruction to the need of individual students as much as possible so that dull, average and bright students may all have a chance to progress at their own pace.

8. Students should be given adequate opportunity to work in groups and to carry out group projects and activities so as to develop in them the qualities necessary for group life and cooperative work.

9. As the proper use of a well-equipped school-library in absolutely essential for the efficient working of every educational institution and for encouraging literary and cultural interests in students, every Secondary school should have such a library ; class libraries and subject libraries should also be utilised for this purpose.

10. Trained librarians, who have a love for books and an understanding of students' interests, should be provided in all Secondary schools and all teachers should be given some training in the basic principles of library work, in the Training colleges as well as through refresher courses.

11. Where there are no separate Public Libraries the school libraries should, so far as possible, make their facilities available to the local public and all Public Libraries should have a special section for children and adolescents.

12. In order to improve general standards of work in school, necessary steps should be taken to produce textbooks as well as books of general reading which are of distinctly superior quality to the books at present available.

13. Suitable literature for the guidance and inspiration of teachers should be produced by the Education Departments of all States and either the Office of the Director of Education or one of the Training colleges should be adequately equipped for the purpose.

14. In order to popularise progressive teaching methods and facilitate their introduction, "Experimental" and "Demonstration" schools should be established and given special encouragement where they exist, so that they may try out new methods freely without being fettered by too many departmental restrictions.

CHAPTER VIII

THE EDUCATION OF CHARACTER

I

The Basic Principles

In dealing with the aims and objectives of education, we have made it clear that the supreme end of the educative process should be the training of the character and personality of students in such a way that they will be able to realise their full potentialities and contribute to the well-being of the community. One of the main criticisms against modern education is that, by concentrating too much on examinations, enough attention is not devoted to activities that promote the formation of character and inculcate ideals which make for personal integrity and social efficiency. We propose, therefore, to devote special attention to some of the problems which arise in this field, to discuss the basic principles which should underlie our approach and to suggest what the schools can do to deal with them.

Need for Co-operation between School and Community

We should, in the first place, take due note of the fact that the school is a small community within a larger community and that the attitudes, values and modes of behaviour—good or bad—which have currency in national life are bound to be reflected in the schools. When we complain to indiscipline or lack of earnestness or slipshod methods of work or failure to appreciate the dignity of labour in the students, we should not forget that these may be due largely to defects in the community. This does not imply that we can condone this failure of the schools to impinge purposefully on the character of their students but it is meant to bring out the complexities and the magnitude of the problem. A radical and comprehensive approach to it cannot be confined to the school but must take the whole situation into account. There is no doubt that the beginning must be made in the schools and these cannot be content merely with reflected outside trends; they must provide a *selective* environment in which children may be able to transcened, to some extent, limitations of their home and neighbourhood. In the great debate that has been going on for decades between those who hold that education must only seek to *adjust* the individual to his environment and those who think that it should be an agency for the "superior *reconstruction*" of the environment and its pattern of life, we are definitely on the side of the dynamic and creative view of education. We are convinced that it is the business of the school to train individuals who will not only

be duly appreciative of their culture and the good qualities of national character and national traditions but will also be able to analyse and evaluate it critically, to eschew whatever is weak or reactionary and to develop the qualities of character and intellect needed for the purpose. Our school teachers can be infused with a high sense of their destiny only when they are made to realise that they are engaged in the making of better human beings and a better social order and not merely teaching a dull, prescribed syllabus.

Secondly—and this follows as a natural corollary from what we have said above—in this education of character, the school has to win the active cooperation of the parents and the community in general. If the various educative agencies—the home, the school, the neighbourhood, the community, the religious organizations and the State—have no common outlook and agreed ideas about this problem but pull in different directions, the schools will not be able to make an abiding and coherent impression on the character of its students. After all, they spend only one-fourth or one-fifth part of the day in school and the rest of their time is passed in direct or indirect contact with these other agencies, which can easily undo the good work of the school. For, it is essentially the whole of the community and not merely the school that educates. This implies the establishment of that active association between parents and teachers to which we have referred elsewhere. This should not be limited to rare and special occasions and to the sharing of mutual complaints and grievances but should result in a better understanding between them and in reconciling their ideas and values so that, as far as possible, the same kind of motives, methods and impulses may play on the formation of the students' character at home as in the school. This association should, however, go further and draw into its train not only the parents of the students on the rolls but also other influential and worthy members of the community and leaders of various educative agencies who should be afforded opportunities of coming into contact both with teachers and children, of talking to them and discussing problems of common interest with them. In this way the staff of the school can tactfully help in building up a pattern of influences and activities in the life of the community which will cooperate with the school in moulding the students' character on right lines.

Thirdly, it must be remembered that the education of character is not something which can be relegated to a particular period or a particular teacher or the influence or a particular set of activitics. It is a project in which every single teacher and every item of the school programme has to participate intelligently. This is a truth which most teachers would readily concede in theory. Some are apt to believe that it is the special theme of religious and moral instruction or the special

object of team games and certain extra-curricular activities and has little, if anything, to do with the day-to-day and the hour-to-hour work of the school. We should like to emphasize, as strongly as we can, the basic principle that 'character is forged on the anvil of action'—of every kind of action, academic, social, manual or moral—and the way in which the student performs his manifold duties in school or at home leaves an indelible impression on him. We would like to remind our teachers of Carlyle's carpenter who "broke all the Ten Commandments with every single stroke of his hammer !" It is possible to organize school work in such a way and to build up such traditions that the students will do *everything* they undertake with efficiency, integrity, discipline, cooperation and good temper. It is also possible for teachers and students alike to do their work in a haphazard, slipshod manner, without any discipline or social sense. We recommend that the Headmaster and staff should discuss this crucial problem amongst themselves and plan their work in such a way that the qualities of character and mind, that they wish to inculcate are reflected in everything that they do—the compositions they write, the speeches they make in the debating society, the pictures they paint, the maps they draw, the social activities they organize, the craft work they undertake. This would require the setting before them of high standards of work and conduct—both personal and impersonal—and creating the desire to approximate to those standards. It would also call for the rejection of any work—and deprecation of any form of behaviour—that falls below the standard that may be expected from the particular student concerned. If all school work and activities are made psychologically interesting and exacting—in the sense of challenging the full powers of the adolescents—and if they are trained to take them up in the right spirit, the most congenial conditions will be created for the right training of character.

Studies and Character Formation

While we recognize the basic importance of *work* in this context, we should not undervalue the part that the proper presentation of the curriculum and the reading of great books can play in this behalf. Teachers can present *all* school subjects—particularly the social studies —in such a way that the students may develop a right outlook on the world in which they are living and acquire a proper appreciation of the nature of human relationship—individual as well as group relationships. History and Geography can both, in their way, show the mutual interdependence of nations and groups and, together with science, they can demonstrate how all great human achievements have been made possible through the silent, often unrecognized, work of numerous individuals and groups belonging to all parts of the world. They can also make their pupils realize how these great achievements calls for high standards of efficiency and integrity which are the basis of good character,

Similarly, an imaginative and sympathetic study of literature—not just text-books but great books and great authors—can inculcate noble ideals and values. By encouraging the habit of reading and by gradually raising the standards of taste and appreciation, the school can mobilise a powerful and beneficial influence which will continue to exercise its sway throughout their life.

It is in the context of these general principles that we have to visualise the problems of character education. And this has to be visualised not in a social vacuum but with reference to our contemporary socio-economic and political situation. While the basic ideals and values of good character may be regarded as permanent, they have to be interpreted and applied in the special circumstances of our national life. We have already discussed, at some length, in the Chapter on the Aims and Objectives of Education, the type of mind and character that must be in the expanding life of their country. It is not necessary for us therefore to recapitulate that discussion and we can well confine ourselves to pointing out certain special issues that must be considered by all educationists and to suggesting how they can be successfully tackled. We propose to draw special attention to three of these issues—the problem of discipline, the question of moral and religious instruction and the part that the various extra and co-curricular activities can play in this field.

II

DISCIPLINE

No amount of improvement and reconstruction in education will bear much fruit if the schools themselves are undermined by indiscipline. It is clear from much of the evidence we received that students and teachers alike need more of spirit of discipline. If proper education is to be given, acts of indiscipline prevalent in schools have to be checked.

Influence of Political Movements on Discipline

Indiscipline may take the shape of group indiscipline or individual indiscipline. Group indiscipline is the worst of the two. While as individuals many of our students are as good as students anywhere, the tendency to group indiscipline has increased in recent years. Many causes have led to this group indiscipline. Incidents of indiscipline reported from elsewhere have their demoralising effect on students. For various reasons under a foreign regime, acts of indiscipline become frequent, often necessitated by the political activities which were launched against a foreign government. While there may have been justification for such indiscipline under different practical circumstances, we feel that there is no justification for such acts of indiscipline after the attainment of independence.

The democratic constitution which the country has adopted permits of the redressing of grievances through a democratic machinery. It would be against all principles of democracy, in fact it would be against the very trend and safety of democracy, if such acts of indiscipline were to continue.

Factors Promoting Discipline

The real purpose of education is to train youth to discharge the duties of citizenship properly. All other objectives are incidental. Discipline therefore should be a responsibility of parents, teachers, the general public and the authorities concerned. There are some positive factors promoting discipline. The Indian students' natural tendency is to be disciplined. It is only when forces act strongly on him that he may sometimes be led astray. He appreciates the rules and is normally inclined to abide by them. Much can be done to encourage this trend in school life. Personal contact between the teacher and the pupil is essential, and it is from this point of view that we maintain that there should be some limit in the number of pupils admitted into different sections of a class and to the whole school. Reference has been made to this aspect in another place. Emphasis is also to be laid on the role of the class-teacher and the headmaster in promoting general discipline and the welfare of the pupils. In regard to school life itself, a greater responsibility should devolve upon the students themselves in the maintenance of discipline. Nothing is more calculated to develop a proper sense of self-discipline, and proper behaviour than their enforcement not by any outside authority with any symbol of punishment, but by the students themselves. They should choose their own representatives to see to it that proper codes of conduct are observed, both for the sake of the individuals and for the good name of the school. It is from this point of view that we commend what is known as the house system in schools, with prefects or monitors or student councils, whose responsibility it will be to draw up a code of conduct and to enforce its observance in the school.

Another important method of bringing home to the pupils the value of discipline is through group games. It is on the playing fields that the virtue of playing the game for its own sake and the team spirit can be cultivated. Such extra-curricular activities as boy scouts and girl guides, the national cadet corps, junior Red Cross and social service activities will promote a proper spirit of discipline. The building up of a truly harmonious and united form of community life in the school should be the endeavour of all institutions.

Besides these positive factors certain negative factors also promote discipline. The discipline of the youth of any country, depends upon the discipline that is exercised by elders. In some parts of the country, on occasions, certain of the activities of leaders have not been such as are

calculated to promote a healthy spirit of discipline in the younger generation. School authorities are not always to blame for indiscipline in the schools. We have been given to understand that at the time of elections whether to the legislatures or to some civic bodies, those who aspire for such places do not hesitate to utilise the students for the furtherance of their objective, namely, the winning of the election. It is a well-known fact that in all democratic institutions, election time is a time of feverish activity not always conducted in the most healthy spirit, and the utilisation of immature mind for purposes of campaigns with or without slogans attached thereto is not calculated to promote sound discipline among students. We think it unfortunate that such trends are on the increase. If therefore some of the unhealthy trends of political life are to be avoided in school life, a serious attempt should be made to see that children under the age of 17, who are in schools are not drawn into the vortex of controversial politics and are not utilised for election purposes. The suggestion has been put forward that it should be considered an election offence for any member or party to utilise the services of these pupils in political or civic campaigns. It may be difficult to prove which party has utilised students, but this should not be beyond the power of an election tribunal to tackle. We therefore recommend that suitable legislation should be passed making it an election offence to utilise students below the age of 17 for any of the purposes of political propaganda or election campaign.

There is another aspect of the question which we would like to mention. It is good that some of our politicians address our students. It has an educational value and we should like to encourage this practice of addressing gatherings of students in schools. In actual practice this has led to certain anomalies in the publicity given by the Press to such meetings. Persons who address these gatherings have different audiences in mind and speak not infrequently in a different strain from what is desirable or necessary at school gatherings. We do not wish to generalise on this point because there are many honourable exceptions, but the tendency in view of the publicity given is to speak not to the audience before them, but to a wider audience whose attention they wish to attract. This is not a healthy trend for school education and discipline.

Role of Teachers

Lastly discipline among students can only be promoted if there is discipline among the staff. Both within the school and in organizations connected with the teaching profession, the teacher has always to realise that all his activities are being watched by his pupils. To that extent therefore, both in his personal conduct and in his general attitude to all problems concerning the country, he has to realise that there are limitations within which he must act for the best interests of the profession.

We welcome the opportunity afforded in our Constitution for the teaching profession to be represented in the legislatures of the country. To whatever group or party he may belong, it is necessary for him to adhere to the principles mentioned above.

Instances have been brought to our notice where school managers or members of Managing Boards have not refrained from utilising their position to influence teachers and pupils to participate in political or other electioneering activities. The recommendation that we have made that the utilisation of pupils should be considered an election offence will probably go a long way to inhibit this increasing tendency. Ultimately, however, it is the school atmosphere and the teacher working there that ensure proper codes of conduct and discipline in the schools.

III

RELIGIOUS AND MORAL INSTRUCTION

Religious and moral instruction also play an important part in the growth of character. At different places which the Commission visited, a good deal of emphasis was laid on this aspect of education. There is little doubt that the whole purpose of education is not fulfilled unless certain definite moral principles are inculcated in the minds of the youth of the country. The necessity for religious education has also been emphasised by some, while others are not in favour of religious instruction, in view of the diverse forms of religions practised in our country, and the positive decision in the Constitution that the State will be a Secular State. This does not imply that because the State is secular there is no place for religion in the State. All that is understood is that the State as such should not undertake to uphold actively, assist, or in any way to set its seal of approval on any particular religion. It must be left to the people to practise whatever religion they feel is in conformity with their inclinations, traditions, culture and hereditary influence.

Against this background we have considered this question very carefully. The present position with regard to religious education is that there are certain schools, particularly those conducted by denominational agencies, where religious education is given. There is, however, a clause, which is being increasingly put into effect that no person who does not belong to a particular religion can be compelled to attend religious instruction. We are given to understand that in most such schools it is now the rule rather than the exception that religious instruction is confined only to those of the particular faith. In some of these schools what is known as moral instruction is given to such of those pupils who do not attend religious instruction. Whether religious instruction or moral instruction is given, the benefit of such instruction

will be derived not from its being treated more or less on the lines of class room instruction but from the spirit of the school and the influence exercised by the teachers. Healthy trends in regard to religious or moral behaviour spring from three sources :

(1) The influence of the home which is the dominant factor ;

(2) The influence of the school through the conduct and behaviour of the teachers themselves and life in the school community as a whole ;

(3) Influences exercised by the public of the locality and the extent to which public opinion prevails in all matters pertaining to religious or moral codes of conduct. No amount of instruction can supersede or supplant these three essential factors. We, however, feel that such instruction can be supplemented to a limited extent by properly organised iustruction given in the schools. One of the methods adopted in some schools is to hold an assembly at the commencement of the day's session with all teachers and pupils present, when a general non-denominational prayer is offered. Moral instruction in the sense of inspiring talks given by suitable persons selected by the headmaster and dwelling on the lives of great personages of all times and of all climes will help to drive home the lessons of morality. In view of the provision in the Constitution for the Secular State, religious instruction cannot be given in schools except on a voluntary basis and outside the regular school hours ; such instruction should be given to the children of the particular faith and with the consent of the parents and the managements concerned. In making this recommendation we wish to emphasise that all unhealthy trends of disunity, rancour, religious hatred and bigotry should be discouraged in schools.

IV

EXTRA-CURRICULAR ACTIVITIES

Elsewhere we have referred to the place and importance of what are called "extra-curricular" or "co-curricular" activities. We would like to draw pointed attention here to their significance for the education of character. They are as integral a part of the activities of a school as its curricular work and their proper organisation needs just as much care and fore-thought. Such activities will naturally vary, within limits, from school to school depending upon its location, its resources and the interests and aptitudes of the staff and students. If they are properly conducted, they can help in the development of very valuable attitudes and qualities. We propose to refer here briefly to some of these activities from the point of view of their incidence on character.

Scout and Guide Activities

The Scout and Guide movement has taken deep root in India and the new organisation, the Bharat Scouts and Guides, has many branches in all the States. Scouting is one of the most effective means for the training of character and the qualities necessary for good citizenship t has the great merit that it appeals to pupits of all ages and taps their manifold energies. Though its various games, activities and technical skills, it is possible to lay the foundation of the ideals of social service, good behaviour, respect for leaders, loyalty to the State and a preparedness to meet any situation. The Commission has noted with pleasure the keen interest that is being taken in this movement in some of the States and is of the opinion that it should receive the fullest encouragement from all State Governments and that necessary provision should be made for carrying on all its activities in school and in camps. It would be of great advantage if, in each district or regional area, a centre is selected where scouts can meet for their annual camps and learn self-reliance through the daily life and activities of the camp. The All—India Scout Camp at Taradevi, Simla Hills, is a very good example of the kind of thing we have in mind. We recommended that the State should give adequate financial assistance to the scout movements and should help to secure suitable sites for scout camps. Scouting and Guiding require proper guidance and, for this purpose, it is desirable that some of the teachers should be trained in organising scout groups and supervising their activities. In this connection we may also refer to the need to open summer camps and holiday homes for school students in general. Such camps, too, can help to mould character by making pupils self-reliant and by enabling them to recognise the dignity of labour and the value of group work as well as healthy community life. All schools should, as far as possible, afford an opportunity for groups of their students to spend a few days in such camps every year.

National Cadet Corps

During the last few years, the Government of India has instituted the Junior Division of the National Cadet Corps which is open to pupils of all schools. The officers are drawn largely from the teaching profession. This has the advantage of bringing teachers and pupils into close contact in the training camps. Through the N. C. C. certain physical and other activities of a quasi-military nature are taught to the pupils. We have noted with pleasure the keen interest taken by them in this training and the general demand for its expansion. Owing to financial difficulties, however, many of the States Governments have not been able to meet this demand, so that a large number of schools are left without National Cadet Corps. To ensure its proper organization, efficiency and development it is necessary to centralize its working. The present

variations in regard to equipment, dress, parades and some of the other necessary amenities require that this important organization should be a Central responsibility. Moreover, the recruitment and the training for the N. C. C. should receive greater attention from the Defence Department. We recommend, therefore, that the N. C. C. should be brought under the Government of India which should have the responsibility for its proper maintenance, improvements and expansion. The States should, of course, cooperate fully in the furtherance of the movement.

Training in First Aid, Junior Red Cross and St. John's Ambulance

These have a special value because they enable the students to render useful forms of social service and thus gain a sense of personal and social worth. We feel that it will be of great advantage to the students as well as to the community if every student is trained in First Aid and Junior Red Cross work and if some of the students receive training in St. John's Ambulance work. Such training would be utilized on the occasions of fairs, festivals, epedemics or floods or whenever large congregations of people happen to meet at a centre. We have recommended elsewhere that some teacher should be trained in ambulance work and first aid. If that is done, they could be entrusted with the task of training their pupils under the guidance of qualified officers of these organizations.

Other Extra-Curricular Activities

There are many other extra-curricular activities which schools can and should develop to the best of their ability and resources, *e.g.*, hiking, rowing, swimming, excursions, debates, dramas, drawing and painting, and gardening. All such activities add to the appeal of the school and release the creative talents and social aptitudes of the childern. We repeat that the success of these activities depends very largely upon the interest evinced by the teaching staff. While the students should be encouraged in every way to stand on their own feet and develop these activities through their own initiative, the teachers should be at hand to help and guide them so that their educative possibilities may be fully exploited and they may ensure that *all* students take part in one or more of these activities. It is for this reason that we have recommended that all teachers should devote a definite time to such activities and this time should be taken into account in fixing their maximum hours of work. We feel that, while part of the money may come from students' voluntary contributions or a specific fee charged for the purpose, the Education Department should give liberal grants for their encouragement. The contribution that they can make to the training of character and the awakening of cultural and practical interests is so important that petty considerations of economy should not be allowed to starve them.

All these various agencies that we have discussed—the home, the school with its curriculum and methods and discipline and extra-curricular activities, and the local community—will exercise their influence in shaping the character of the students. The books that they read, the moral and religious instruction that is imparted to them and the personal example of the teachers will inculcate the right ideals and values. But the most potent of these will be the all-pervasive influence of the life of the school as a community, its wisely planned schedule of functions and duties, its mutual give-and-take, and its willingly accepted discipline, its chance of leadership, and its opportunities for social service. The success and the psychological understanding with which the school can be organized as a community will largely determine how far it can effectively function as an agency for the education of character.

SUMMARY OF RECOMMENDATIONS

Discipline—

1. The education of character should be envisaged as the responsibility of all teachers and should be provided through every single aspect of school programme.

2. In order to promote discipline, personal contact between teacher and the pupils should be strengthened ; Self-Government in the form of house system with prefects or monitors and student-council, whose responsibility will be to draw up a Code of Conduct and enforce its observance, should be introduced in all schools.

3. Special importance should be given to group games and other co-curricular activities and their educational possibilities should be fully explored.

4. Suitable legislation should be passed making it an election offence to utilise students below the age of 17 for the purposes of political propaganda or election campaigns.

Religious and Moral Instruction—

5. Religious instruction may be given in schools only on a voluntary basis and outside the regular school hours, such instruction being confined to the children of the particular faith concerned and given with the consent of the parents and the managements.

Extra-Curricular Activities—

6. Extra-curricular activities should form an integral part of education imparted in the school and all teachers should devote a definite time to such activities.

7. The State should give adequate financial assistance to the Scout Movement and should help to secure suitable sites for Scout Camps; schools should, as far as possible, afford an opportunity for groups of their students to spend a few days every year at such camps.

8. The N.C.C. should be brought under the Central Government which should take the responsibility for its proper maintenance, improvement and expansion.

9. Training in First Aid, St. John's Ambulance and Junior Red Cross work should be encourged in all schools.

CHAPTER IX

GUIDANCE AND COUNSELLING IN SECONDARY SCHOOLS

I

Importance of Guidance to pupils

The provision of diversified courses of instruction imposes on teachers and school administrators the additional responsibility of giving proper guidance to pupils in their choice of courses and careers. The secret of good education consists in enabling the student to realise what are his talents and aptitudes and in what manner and to what extent he can best develop them so as to achieve proper social adjustment and seek right types of employment. The subject of guidance has gained great importance in many countries in recent years particularly in America. In many schools well planned efforts are made to provide assistance to individual boys and girls in deciding upon their future careers and education, and other personal problems. In our country, unfortunately, not even a beginning has been made in this direction, except in a few States.

Educational and vocational guidance is not to be regarded as a mechanical process whereby the advisers and teachers sort out boys and girls as a grading machine sorts out apples! It is not a question of just deciding that one boy should stay on the farm, another work in an aeroplane factory, a third become a teacher and a fourth take to the management of a garage. Guidance involves the difficult art of helping boys and girls to plan own future wisely in the full light of all the factors that can be mastered about themselves and about the world in which they are to live and work. Naturally, therefore, it is not the work of a few specialists, but rather service in which the entire school staff must co-operate under the guidance of some person with special knowledge and skill in this particular field. Guidance in this sense is not confined to the vocational field only. It covers the whole gamut of youth problems and should be provided in an appropriate form at all stages of education through the co-operative endeavour of understanding parents, teachers, headmasters, principals and guidance officers.

Qualification of a Guidance Officer

A good Guidance Officer possesses many good qualities. He must have an understanding of young people and their problems, based on scientific knowledge but inspired with sympathy and the ability to

look at life through the eyes of boys and girls. He should have special training in good counselling methods, mental hygiene and in the discriminating use of tests and school records. In the field of vocational guidance he should have an accurate knowledge of occupational opportunities and requirements. He must have ample time for conferences with pupils, parents and employers, and he must be fully familiar with the purpose and programme of the school and have the capacity to work in close cooperation with the teachers.

Role of the Teachers

In all schools a good deal of guidance work will have to be done by the teachers in the class through informal contacts with their students. They can play a very important role in this respect. The Guidance Officer will gather much useful information from them helping him to understand students and their needs and problems. Likewise, he will furnish them with information which would enable them to fit class work more carefully to students' aptitudes and needs.

Principles to be Observed in Guidance

There are certain important points to be borne in mind in connection with educational and vocational guidance. Personal differences which are a permanent psychological feature at this stage must be recognised, understood and given due attention. Accurate, comprehensive and continuous information about occupations and about institutions of higher study should be made available to the pupils, as without this information they cannot intelligently determine their future line of action. Vocational and educational guidance should be made available to the individual pupils at different stages because of the possible changes in his economic status, his aptitudes and interests as well as the changes that are likely to occur in the nature of the occupation. Care should be taken to see that students do not decide upon a vocation too early or too hurriedly, but only after a careful study of the openings available and in the light of experience gained through trials. There should, therefore, be provision for a reconsideration of their plans at the different stages of education.

Career Masters

In some States we found that investigations in Guidance have been started and experimental laboratories established, both for purposes of research and to train guidance officers. In States where a beginning has been made there are Career Masters attached to schools who have received a certain amount of training to enable them to discharge their duties as Vocational Counsellors. We are aware that in some Universities the Students' Information Bureaus are trying to collect necessary information for the use of their students. There are also in most States Employment Exchanges which may give information to those seeking employment.

This is, however, a different thing from what is needed at the school stage. In most of the States there has been no serious attempt so far to make a scientific study of the available careers or to bring home to the pupils the possibilities open to them at the different stages of their education. It is not a question here of finding employment, but of seeking the knowledge necessary to equip students adequately for suitable types of work. It is at this stage that vocational guidance is required and Career Masters can be of help in placing these pupils in their proper position or in giving advice to pupils in the choice of vocation suited to their training and aptitudes.

Place of Visual Aids

The development of new types of visual aids provides unlimited possibilities for the pupils to obtain knowledge of the different occupations open to them at different stages of their educational ladder. Thus to broaden the pupils' understanding of the scope, nature and significance of the occupations or industries, films should be available which not only depict the actual nature and conditions of work in a particular industry but also supplement this with information concerning the daily routine of the worker on the job. Vocational guidance films are available in different countries to bring home to the young student the different types of employment that are available as well as what is expected of the employee who choose a particular vocation. We believe that in this country, there is urgent need to prepare such educational films showing the conditions of industrial, agricultural, technical and other vocations which will give the students information as well as guidance in the choice of their vocation.

It is not to be expected that every student will necessarily accept what the teacher or the headmaster or the counsellor may advise him to do. In some cases the parents' influence may out-weigh his opinion or the student may have a higher opinion of his own talents than the more sober and objective view taken by the Guidance Officer. We feel however, that if the system is tried with tact and sympathy and with the cooperation of all persons concerned, it will develop, in course of time, into a valuable method of avoiding the present waste of talent, and it will fit the trained aptitudes of students into types of work which they can do efficiently and through which they can achieve at least a certain measure of self-fulfilment.

Role of Government Agencies

In all progressive countries, Government aims at a wide dissemination of facts concerning various occupations and constantly seeks to establish suitable agencies and techniques which will enable every individual to find employment suited to his inclination, ability, and skill.

There should be in every region in India a centre for the training of Guidance Officers and Career Masters and their services should be made available, in an increasing measure, to all educational institutions so that guidance may be given to students at different levels of education, particularly at the secondary stage at which decisions about employment have to be taken by a large majority of students.

Career Conference

Among the agencies for imparting information about occupation is the "Career Conference" of teachers, parents, students, employers and successful persons from different vocations. Such a conference can stimulate interest, give fuller knowledge of vocational requirements and encourage students to avail themselves of the service provided by the vocational and educational guidance staff. At this conference successful men and women from various walks of life can be invited to discuss the requirements and opportunities in their special fields of work. The pupils, too, should participate in it so that their interest may be stimulated and their curiosity fully satisfied. Often they do not know the further facilities available in technical higher education or the conditions of admission and the nature and duration of these courses, or the level of efficiency that they must attain if they are to pursue them successfully. It would be the business of the Guidance Officers to provide necessary information and advise about all these matters.

The Centre's Responsibility

We have referred briefly to the need for guidance, the place of Career Masters in schools, and the resposibility of the headmasters and teachers in regard to the future of their pupils. If this scheme is to be implemented satisfactorily, we are of the opinion that the Centre should take the responsibility of opening in different regions, institutions for the training of Guidance Officers and Career Masters, to which each State should depute its nominees. It would be neither possible nor economical for each State to set up its own training centres. It may be possible to attach some of these centres to teacher training institutions so that, besides providing necessary training for Guidance Officers and Career Masters, they may also train the teachers in the general principles of educational and vocational guidance. This will help them to understand better the methods of observation to ascertain the aptitudes of the pupils under their care, and thus enable them to cooperate with the Career Masters more intelligently in the common problem of adapting instruction to the pupils and preparing the pupils more successfully for their future vocations.

In addition to the training institutions for Guidance Officers that we have envisaged, we recommend that a Central Research Organization may be established for carrying out research in educational and vocational

guidance and for the preparation of tests with particular reference to Indian conditions and the needs of the pupils concerned and the opportunities available to them from time to time.

In order to fulfil all the purposes we have in view we also recommend that in every State there should be a Bureau of Vocational and Educational Guidance whose duty would be to plan and co-ordinate the activities recommended above.

SUMMARY OF RECOMMENDATIONS

1. Educational guidance should receive much greater attention on the part of the educational authorities.

2 In order to broaden the pupils' understanding of the scope, nature and significance of various occupations of industries, films should be prepared to show the nature of the work in various industries and this should be supplemented by actual visits.

3. The services of trained Guidance Officers and Career Masters should be made available gradually and in an increasing measure to all educational institutions.

4. The Centre should take up the responsibility of opening in different regions centres of training for Guidance Officers and Career Masters to which each State may send a number of teachers or other suitable persons for training.

CHAPTER X

THE PHYSICAL WELFARE OF STUDENTS

I

Importance of Physical and Health Education

The physical welfare of the youth of the country should be one of the main concerns of the State, and any departure from the normal standard of physical well-being at this period of life may have serious consequences—it might promote disease or render the individual more easily susceptible to certain diseases. In many countries, particularly during the two world wars, an examination of young men recruited for war service revealed a disproportionately large number who were unfit for such work. In India even among those persons who were recruited on a voluntary basis, it was noted that quite a large number of them were physically unfit for military service. It would not be an exaggeration to say that, if the whole of the population at the particular age-period at which recruitment takes place had been subject to a similar examination, the proportion of the unfit would have been higher than in any other country. Physical fitness and health education, therefore, assume an importance that no State can afford to neglect.

It is often stated that the proper care of the health and sound physical education require an expenditure that may not be within the reach of the State Government. It is unfortunate that a long-range view has not been taken in this matter. To allow the youth to suffer from physical handicaps and thus to fall a victim to diseases and to allow incipient diseases to lie dormant and then develop, is to increase the number that would require hospital treatment. Such an approach naturally swells the medical budget of the country. Apart from this aspect, it has to be recognised that the increase in the number of physically handicapped people and those of low health level means an increase in the number of those with diminished economic value and efficiency. The earning capacity of such individuals being seriously diminished, it becomes an economic drain on the resources of the country to support them and their families. If both these points are taken into consideration, it will be seen that economising in health education and physical welfare is unsound economy because the State has to spend much more on medical services than it would under properly organised schemes of physical and health education.

HEALTH EDUCATION

From what has been stated, it must be clear that unless physical education is accepted as an integral part of education, and the educa-

tional authorities recognise its need in all schools, the youth of the country, which form its most valuable asset, will never be able to pull their full weight in national welfare. The emphasis so far has been more on the academic type of education without proper consideration being given to physical welfare and the maintenance of proper standards of health of the pupils.

Measures to be Adopted

We shall now refer to some considerations that may be borne in mind in regard to health education. Every student in the school requires to be trained in sound health habits both at school and at home. The instruction should be practical so that he may not only appreciate the value of health education but also learn the ways in which he can effectively maintain and improve his health. This is essential not only for physical reasons but because sound mental health depends on good physical health. It should, therefore, be a responsibility of all schools to see that their children keep healthy so that they can get the maximum benefit possible from their education.

Medical Examination

It is necessary for this purpose to subject all students to a medical examination, to ascertain whether they are normal in health and standards of physical development. Although the system of school medical inspection has been in existence for a number of years in many States, we are of the opinion that the results have not been satisfactory for the following reasons :—

(*i*) The medical inspection has been done in a perfunctory manner.

(*ii*) The defects that have been brought out even by this type of examination have not been remedied because the remedial measures suggested are often not carried out.

(*iii*) There is no follow-up, not even in the case of those who have been declared as defective.

(*iv*) Effective cooperation has not been established between the school authorities and the parents, and either through ignorance or through lack of financial resources or both, the parents have taken little interest in the reports of the school medical officers.

We feel therefore that unless the present system is improved considerably, it would be a mere waste of time and money to continue it. To bring about necessary improvements, we recommend that :

(i) Health examination should be thorough and complete. If a choice is to be made between frequent and cursory examinations and

more thorough examinations at longer intervals, the latter are greatly to be preferred. Every pupil in the school should undergo at least one complete examination every year while in school, and one just prior to leaving the school.

(ii) Pupils with serious defects and those who suffer from severe illnesses should be examined more frequently.

(iii) Much more should be done to assure prompt and effective or follow-up whenever examinations reveal the need for corrective or remedial measures.

(iv) One copy of the health report should be kept by the school medical officer, another copy should go to the parent, and a third copy to the teacher incharge of a particular group of students. This copy should be kept as part of the personal record of the pupil and on this should be based the programme for his health instruction and physical education. It should be the duty of the school physician to study the reports of health examinations and to select those cases for which remedial or corrective treatment is indicated. Thus the health and safety of students will become an important concern of the entire school and activities for promoting and safeguarding health will find a place throughout the school programme.

School Health Service and the Community

We have stated at another place that the whole concept of the duties of the school needs to be enlarged, by including in it various forms of fruitful co-operation with the community. There are various fields in which the school can serve the community, and various fields in which the community can co-operate with the school. It is important to remember that in regard to the health and the care of the children, the activities of the school should be extended to their homes, and neighbourhood and to the village or city as a whole. The reason for this is obvious. The health of school children is determined not only during the hours spent at school but even more so during the time spent at home and in the neighbourhood of the home and at work. If the school neglects the home and community factors, these out-of-school influences may prevent or cancel many of the beneficial effects of the school's endeavour to improve the health of the child. It is not suggested that schools can directly control the conditions outside, but they *can* influence them by educating both the pupils and their parents, by co-operating with the physicians and the health authorities of the city and village, and by educating the public to a better appreciation of its health problems and a better recognition of what they can themselves do to improve health conditions. We may go further and say that if the school could actually do something to improve the conditions of sanitation in small, selected locality, it would be the best health education for both pupils and

parents and, in fact, the whole community. In this endeavour, the health authorities of the locality should give their active co-operation and assistance to the school. This would also be a very good method of promoting the idea of the dignity of labour in the children.

This approach to the maintenance of school children's health may appear impracticable at first sight. But a clear appreciation of the factors involved and a better co-ordination of the agencies concerned with the promotion of health will show that the adopting of such measures can produce tangible results within a reasonable time.

The Role of Teachers

We have stated that there should be a systematic follow-up and that active methods should be adopted to afford the full benefits of medical treatment for such students as need it. In regard to the health of school children, it is necessary to realise that it is the teacher who can detect at a very early stage any deviation from the normal, such as defective vision, postural defects, deficient hearing, etc., because he is in constant contact with the child. We have, therefore, emphasised in the Chapter on Teacher-Training that training in first aid and fundamental principles of health as well as the detection of deviations from normal standards should form a part of the instruction prescribed for all teachers in Training Colleges. If such training is given in the first principles of health maintenance, teachers can play a valuable part in bringing to the notice of the school medieal officer or other authorities concerned any cases of deviation from the normal at a fairly early stage.

Medical Examination of Children in Hospitals

A scheme has been formulated in one of the States, whereby in those areas where well equipped hospitals are situated, the school children may get the benefit of attention from the specialists of the hospitals. In cases where defects have been noted and medical treatment is required, the children may be taken in groups by the teacher, the school medical officer or the physical director to the hospital concerned on one or two afternoons in the week, when the staff will look after him. It has been suggested that the whole afternoon may be reserved for this purpose. In this way a team of medical officers, who are specialists in such branches as Ophthalmology, Ear, Nose and Throat, Chest diseases, etc., together with a physician would be responsible for taking note of the physical defects and ailments of childrens and getting them suitably treated. Children who require more frequent visits may be advised to attend such afternoon sessions or they may be told the remedial measures which the escorting teacher should see are duly carried out. In view of the paucity of trained personnel and the limited number of hospitals equipped for this purpose, it will not, however, be possible to extend such a scheme over the whole State.

There is reason to believe that, owing to over-crowding and other insanitary conditions of city life, the health of school children suffers much more in urban than in rural areas. At present the opportunities for school children to be taken to well-equipped hospitals are greater in urban areas than in the rural areas. It is suggested, therefore, that to begin with, the school-population of the urban areas may be given the benefit of the scheme and the progress in its working should be watched. It is not by any means implied that the rural children should be neglected. Wherever such defects are noticed in them, it must be ensured that they also get the benefit of proper medical care at the institution situated in the neighbouring towns or cities. They should be taken to the institutions concerned or the medical staff may visit such schools on definite days, arranging mobile hospital ambulances for the purpose. In any case such remedial measures as the school medical officer may suggest should be adopted, and the school authorities should see that they are carried out.

One of the important factors leading to many defects in health is malnutrition. At no period of life does malnutrition play such a large part in causing ill-health, or in promoting defects of growth as in the period of adolescence. Very little is being done at present in educational institutions to see to the proper nutrition of children. We recommend that, in residential schools and hostels, balanced diets suited to different ages should be prescribed by nutrition experts and managements be advised about proper standards for children's diet.

II

PHYSICAL EDUCATION

The Concept of Physical Education

We have dealt with health education first because the success of physical education depends upon the health of the student. It is an indispensable part of all health programmes. Its various activities should be so planned as to develop the physical and mental health of the students, cultivate recreational interests and skills and promote the spirit of team work, sportsmanship and respect for others. Physical education is, therefore, much more than mere drill or a series of regulated exercises. It includes all forms of physical activities and games which promote the development of the body and mind.

If it is to be given properly, teachers of physical education should evolve a comprehensive plan to be followed by the students and it should be based on the results of the health examination. Most of these activities are group activities, but they should be made to suit the individual as well, taking due note of his capacity for physical endurance. Physical education, group games and individual physical exercises should be given,

no doubt, in the school under the supervision of the Director of Physical Education, but there is one aspect of physical education which should not be forgotten. As in the case of health education, the school should 'go to the community' and seek its assistance in the furtherance of the programme of physical education. There are various types of physical exercises that can be taken up by students with the necessary aptitudes, outside the school under the auspices of other agencies in the community interested in physical education, *e.g.*, swimming, boating, hiking, and group games that may be locally popular. Where such facilities are available, special arrangements should be made for school children to avail of them under proper guidance and special hours may be fixed for them in some cases, *e.g.* in swimming baths and *Akhadas*, etc.

Teachers and Physical Education

It has been noted that physical education is generally considered to be the exclusive responsibility of the teacher for physical education. So long as the other teachers of the school do not participate in this matter along with the physical instructor, physical education will not be a success. That is why we have recommended elsewhere that the teachers under training should receive a certain amount of instruction in physical education, while specialists will of course be trained in special institutions. We recommend that all teachers or at least those below the age of 40 should actively participate in many of the activities of physical education and thus make it a living part of the total school programme instead of being a side issue entrusted to an isolated member of the staff.

We place special value on group games as they help to mould the character of the students in addition to affording recreational facilities and contributing to their physical well being. There is one aspect of group games to which we should like to draw attention. Competitive group games between different schools and regions have come to stay and they no doubt increase interest in group games. One defect which is often associated with them has, however, to be guarded against. In order to prepare terms for competitive matches the playing fields are often utilised mainly by the few students who are selected for the school teams, while the majority are content to watch them passively. To develop the health of the school community, it is far more important that the majority of the students should utilise the playing fields than that a small minority should do so far the sake of winning tournaments and bringing a kind of professional credit to the school. The growth of this tendency towards a kind of professionalism in school sports must be carefully resisted.

We have recommended the maintenance of school records for all students, and would like to add here that these should include a full record of all activities in the field.

Training of Physical Education Teachers

Some of the States have established Colleges of Physical Education where training is given for about a year to candidates possessing certain prescribed qualifications. We are of the opinion that the training should be comprehensive including all aspects like health education, first-aid, nutrition, etc. It is important that they should have a good standard of general education. Teachers of physical education in secondary schools should have at least passed the S.S.L.C. Examination and should have received some training in general principles of education and child psychology. They should be associated with the teaching of subjects like physiology and hygiene and should be given the same status as other teachers of similar qualifications in the school. If graduate trained teachers are available, they may take up teaching of certain special subjects. If the training institutions are effectively to discharge their duties, they should be staffed with carefully selected persons of technical competence and well-educated. Physical education does not consist in a mere display of strength but conduces to the physical, mental and moral welfare of the pupil concerned. As regards posts of greater responsibility such as Directors or Inspectors of Physical Education, we feel that training for two years may be necessary.

To provide the Training Schools with qualified physical instructors, there is need for considerable expansion of the training facilities. This may be done by increasing the facilities in the existing colleges and by opening new colleges where necessary. To meet the needs of the whole country we recommend that some of these institutions may be recognised as All-India Training Centres and given help both by the Centre and the State to enable them to train a larger number of personnel.

SUMMARY OF RECOMMENDATIONS

Health Education—

1. A properly organized school medical service should be built up in all States.

2. A thorough medical examination of all pupils and necessary follow-up and treatment where necessary should be carried out in all schools.

3. Some of the teachers should be trained in first aid and general principles of health so that they may co-operate intelligently with the medical staff.

4. Proper nutritional standard should be maintained in hostels and residential schools.

5. The school should assist, where possible, in the maintenance of the sanitation of the area and the school children should thus be trained to appreciate dignity of manual labour.

Physical Education—

6. Physical activities should be made to suit individual and his capacity for physical endurance.

7. All teachers below the age of 40 should actively participate in many of the physical activities of students and thus make them a lively part of the school programme.

8. Full records of physical activities of the students must be maintained.

9. The training in physical education should be comprehensive enough to include all aspects of health education.

10. The teachers of physical education should be associated with the teaching of subjects like Physiology and Hygiene and give the same status as other teachers of similar qualifications.

11. The existing facilities for training of teachers of physical education should be expanded by increasing the seats in the existing colleges, by opening new colleges where necessary and by reorganizing some of the institutions as All-India Training Centres to which aid may be given both by the Centre and the States.

CHAPTER XI

A NEW APPROACH TO EXAMINATION AND EVALUATION

The subject of Examination and Evaluation occupies an important place in the field of education. It is necessary for parents and teachers to know from time to time how the pupils are progressing and what their attainments are at any particular stage. It is equally necessary for society to assure itself that the work entrusted to its schools is being carried on satisfactorily and that the children studying there are receiving the right type of education and attaining the expected standard. This kind of checkup of the school work is essential in the interests of all concerned—pupils, teachers, parents and the public. Examinations are the usual means adopted for this purpose.

Examinations, Internal and External

Examinations may be either internal or external. Internal examinations are conducted by schools from time to time and at least once during the school year, for evaluating the progress of thc pupils, for grading them, and, when the time comes, for selecting and promoting them to a higher class. Of the purposes for which examinations are held, certainly the first, namely, the evaluation of progress is the most important. On it depends not only grading and promotion but even the method of instruction.

Annual examinations are a common feature of our schools. Some schools also hold terminal examinations, *i.e.*, examinations at the end of each term. A few also hold weekly or monthly tests. Usually in the eyes of both the school authorities and the pupils, the most important of these internal tests and examinations is the annual examination. On the results of this examination the annual promotions are decided so that it dominates all other tests and examinations. A few schools have replaced the annual examination by the cumulative results of periodic tests and examinations.

The external examination comes generally at the end of the school stage. Its purpose is two-fold, selective and qualifying, selecting those who have successfully completed a course and qualifying them from among many for the next higher stage. At one time besides the matriculation or University entrance examination (or its equivalent, the School Final or the School Certificate Examination) there used to be in some parts of the country, two other examinations, one at the end of the

primary stage and another at the end of the middle school stage ; and all these were regarded as public examinations. We are told that still these are prevalent in some States. We are convinced that our system of education is very much examination-ridden.

Scope and Limitations of the Present System of Examinations in India.

Both the internal and the external examinations in this country are more or less modelled on similar lines and they follow the same general pattern. Both are intended to test mainly the academic attainments of a pupil and his progress in intellectual pursuits. These do not test the other aspects of the pupil's development ; or if they do, it is only indirectly. The twentieth century has witnessed a widening of the meaning and scope of education. The school of today concerns itself not only with intellectual pursuits but also with the emotional and social development of the child, his physical and mental health, his social adjustment and other equally important aspects of his life—in a word, with an all-round development of his personality. If examinations are to be of real value they must take into consideration the new facts and test in detail the all-round development of pupils.

Even as a test of the intellectual attainments of pupils, the validity and usefulness of the present pattern of examinations have been widely questioned. It has been urged that the present system of examining by means of essay-type questions leaves so much scope for the subjectivity of examiner that it cannot be relied upon to any great extent. In this connection reference may be made to the findings of the Hartog Report on an Examination of Examinations which clearly proves the foibles of such a system. It may therefore be fairly inferred that as at present conducted, examinations do not help us to evaluate correctly even the intellectual attainments of the pupils.

The Effect of the Examination System on our Education

We have already referred to the new concept of education. Unfortunately our present system of education still lays exclusive emphasis on the intellectual attainments of the pupils and this has been due mainly to the influence of our examination system. The examinations determine not only the contents of education but also the methods of teaching—in fact, the entire approach to education. They have so pervaded the entire atmosphere of school life that they have become the main motivating force of all effort on the part of pupil as well as teacher. It is not often clearly realised that a pupil's effort throughout his education is concentrated almost wholly on how to get through the examinations. Unless a subject is included in the examination scheme the pupil is not interested in it. If any school activity is not related, directly or indirectly to the examination, it fails to evoke or enlist his enthusiasm. As regards methods, he is interested in only those which

secure an easy pass rather than in those which may be educationally more sound but which do not directly concern themselves with examinations. He is more interested in notes and cribs than in textbooks and original works ; he goes in for cramming rather than for intelligent understanding since this will help him to pass the examination on which depends his future.

As has already been stated, it is not only the pupil but the teacher also who is affected by this examination craze. To the teacher the system of examination affords an easy solution to many of his problems. While it is difficult, if not impossible, to show immediate, tangible and measurable results with regard to those intangible effects of a good education such as character training, a well rounded personality, a wholesome social adjustment and a proper development of appreciation of the finer values in life, it is much easier to show results in intellectual attainments and academic progress. And if society sets greater store by these attainments than by what is conducive to character building and sound citizenship, how can the teacher help paying attention to the former attainments. Moreover examinations are, comparatively speaking, an easy method of grading pupils and pronouncing judgment on their work. Again, and this is most unfortunate, his success as a teacher is very often measured by the results of his pupils in the examinations. It is not uncommon to hear such statements as 'so and so is a good teacher because his pupils show a high percentage of success in the final examination'. Headmasters in presenting their reports at the annual gather ings lay emphasis on the results of examinations and on the brilliant success of some of their pupils, thus provoking the criticism that the report resembled a profit and loss account presented to shareholders of an industrial concern to judge the work of a teacher by the percentage of passes of his pupils in the examination is to keep alive the old and exploded system of payment by results.

The attitude of the parents also lends support to this state of affairs. Because of the close connection between employment and the passing of external examinations, the average parent is more interested in his child passing that examination than in anything else. Even the authorities who provide higher courses or employ young people are guided almost solely by the certificates awarded on the results of the external examinations. To this may be added the unfortunate trend in recent times to utilise the marks obtained at public examinations as the sole criterion for admission of students to most colleges.

Thus all circumstances conspire today to put an undue and unnatural emphasis on examinations, specially the external examinations and they have come to exercise a restricting influence over the entire field of Indian education to such an extent as almost to nullify its real purpose. Many complained of the hampering effect of examinations.

They said and we generally agree with them, that the examinations today dictate the curriculum instead of following it, prevent any experimentation, hamper the proper treatment of subjects and sound methods of teaching, foster a dull uniformity rather than originality, encourage the average pupil to concentrate too rigidly upon too narrow a field and thus help him to develop wrong values in education. Pupils assess education in terms of success in examinations. Teachers, recognising the importance of the external examination to the individual pupil, are constrained to relate their teaching to an examination which can test only a narrow field of the pupil's interest and capacities and so inevitably neglect the qualities which are more important though less tangible. They are forced to attend to what can be examined ; and to do that with success they often have to 'spoon-feed' their pupils rather than encourage habits of independent study. We were told that in some schools notes are dictated even in the lower classes and after some time the children feel unhappy and helpless if this is not done. This system is not so uncommon as we would wish to imagine.

The Place of Examinations

Nevertheless examinations—and specially external examinations—have a proper place in any scheme of education. External examinations have stimulating effect both on the pupils and on the teachers by providing well defined goals and objective standards of evaluation. To the pupils the examination gives a goal towards which he should strive and a stimulus urging him to attain that goal in a given time, thereby demanding steady and constant effort. This makes the purpose clear and the method of approach definite. He is judged by external and objective tests on which both he and others interested in him can depend. And finally, it gives him a hallmark recognised by all.

For the teacher, too, it is helpful to have a goal and stimulus. Without these his work may lose in precision and direction. The external examination gives him standards common for all teachers and therefore universal and uniform in character. It also releases him from the responsibility of making wrong judgments about the work of his pupils. Finally, the external examination has another great advantage, namely, that it helps a school to compare itself with other schools.

Suggestions for the Improvement of the Present System

In view of all these considerations it would appear that the external examination cannot be altogether done away with. Certain steps however have to be taken to minimise its undesirable effects. Firstly, there should not be too many external examinations. Secondly, the subjective element which is unavoidable in the present purely essay-type examination should be reduced as far as possible. The essay-type examination has its own value. It tests certain capacities which cannot be otherwise tested. But

it cannot be the only test for measuring the attainments of pupils. One of its greatest advantages is that it gives undue weight to the power of verbal expression in which so many individual differences exist. In order, therefore, to reduce the element of subjectivity of the essay-type tests, objective tests of attainments should be widely introduced side by side. Moreover, the nature of the tests and the type of questions should be thoroughly changed. They should be such as to discourage cramming and encourage intelligent understanding. They should not deal with details but should concern themselves with a rational understanding of the problems and a general mastery of the subject matter. In this connection we consider that it is undesirable to set two papers of three hours each on one and the same day. Lastly, the final assessment of the pupil should not be based entirely on the results of the external examination ; other things such as internal tests and the school records maintained by teachers should be taken into consideration and due credit should be given to them. With these safeguards and changes, we feel the external examination can serve a useful purpose.

With regard to the prevalent system of internal examinations also certain changes are necessary. The emphasis on all-important annual examination should be reduced. A few schools have abandoned such examinations. They use the results of periodical tests and of weekly or monthly examinations for purposes of promotion. A few other supplement the annual and periodical examinations by more elaborate records of work done by pupils throughout the year. We commend these steps which will give the annual examination its proper place. The promotion of a child should depend not only on the results of the annual final examination but also on the results of periodic tests and the progress shown in the school record. The pattern of internal examination should also be changed. The objective type of tests should be widely used to supplement to essay-type tests ; other steps suggested with regard to the external examination should also apply in the case of internal examinations.

Need for School Records

But neither the external examination nor the internal examination, singly or together, can give a correct and complete picture of a pupil's all-round progress at any particular stage of his education ; yet it is important for us to assess this, in order to determine his future course of study, or his future vocation. For this purpose a proper system of school records should be maintained for every pupil indicating the work done by him in the school from day to day, month to month, term to term and year to year. Such a school record will present a clear and continuous statement of the attainments of the child in different intellectual pursuits throughout the successive stages of his education. It will also contain a progressive evaluation of development in other

directions of no less importance, such as the growth of his interests, aptitudes, and personality traits, his social adjustments, the practical and social activities in which he takes part. In other words it will give a complete career. We have seen such records being maintained in some schools but their number is few. We recommend that these should be a common feature of all schools all over the country. A few specimens of cumulative record forms will be found in *Appendix VII.* Schools may device their own forms on the lines indicated therein.

Maintenance of Records

This cumulative record will be maintained by the class teacher. The class teacher who will maintain it (he may also be a specialist in charge of a particular subject) is specially placed in charge of a class of pupils for one school year. He teaches them one or two important subjects and thus spends more time with them than other teachers do. He gets to know them personally and individually. His responsibilities as far as his class is concerned are not confined to the four walls of the classroom ; they extend over the pupil's entire life in the school. He is thus the right person to maintain the record.

In some schools a class teacher remains in charge of a class for one year at the end of which he hands over the charge of his pupils to the class teacher of the next higher class. In some other schools the class teacher follows his class from year to year till the class goes out of the school. Both systems have their advantages. Wheher a teacher remains in charge of a class for one year or for a number of years, the important thing is that he gets the opportunity to establish personal contacts with a group of pupils. Such personal contacts, specially for adolescent pupils, have great value, and their importanee cannot be exaggerated.

In most schools some sort of class-teacher system prevails ; but it is not fully exploited because of the supposed importance of teaching by specialist teachers. Often the class teacher's responsibilities consist only in maintaining the class register and collecting monthly school fees from the pupils. There is no inherent contradiction between the class-teacher system and the subject-specialist system. The two can be easily combined in the same system and the class-teacher can function in *loco parentis* for the pupils under his care with great advantage for all concerned.

Teachers and School Records

It has been said that the introduction of cumulative records will increase the responsibilities of teachers and to their work. This is no doubt true. But the advantage would outweigh the personal disadvantage to teachers. And once they become used to the system they themselves will come to appreciate the advantage of such school records. The cumulative records will greatly influence their work in the class-

room, specially their methods of teaching and handling children, so much so that the entire character of their work will change.

Doubts have been expressed whether teachers will be able to discharge this added responsibility satisfactorily ; in maintaining the records will they not be swayed too much by their personal predilections and judgments thereby nullifying greatly the value of these records ? Maintaining the records would need a certain amount of training. We have no doubt that arrangements will be made by the State Departments of Education to provide such training, perhaps in the Training Colleges for teachers. With such training and a certain amount of practice and with an occasional check-up by the head of the institution and by the Inspectorate, we have no doubt that the teachers will be able to discharge these duties to the satisfaction of all. There may be occasional lapses here and there, but these should not cause any anxiety or loss of faith in the teachers. In his sense of responsibility the average Indian teacher does not yield to any teacher in any other country. What he needs is clear direction, encouragement and sympathy.

Need for Research

In order to maintain the cumulative records properly the teachers will have to use a number of tests of different kinds—intelllgence tests, attainment tests, aptitude tests and others. We expect that the State Bureau of Education which will devise the forms of cumulative records will also prepare these tests in collaboration with the Training Colleges. There is need for continuous research in these fields. The Training Colleges should also organise short courses of training in the use of these forms and tests.

Evaluation and Marking

At this stage it is necessary to indicate the actual means to be adopted in evaluating and grading the work of pupils, whether in the external or internal examinations and in maintaining the school records. The present system of evaluating by percentiles. *i.e.*, by numerical marks, out of hundred, may have certain advantages but the disadvantages seem to outweigh the advantages. Firstly, it introduces too many subdivisions which are not only useless but cumbersome ; and secondly, it is indeed difficult to distinguish between two pupils one of whom obtains, say, 46 marks and another 46 or 47. This system no doubt gives the semblance of accurate judgment which for most of the pupils it is hardly worthwhile to exercise and is beset with many errors. In this connection we would again invite attention to the Hortog Report on 'An Examination of Examinations' which fully reveals the limitations and errors of the system. A simpler and better system is the use of the five-point scale to which 'A' stands for excellent, 'B' for good, 'C' for fair and average,

'D' for poor and 'E' for very poor. In this system pupils are grouped in broad divisions which are more easily distinguishable than the differences indicated by percentile marks. We recommend that this system be adopted for school records.

For written examinations, whether external or internal, the same scale may be used with this modification that here D and E will be combined to indicate 'failure'. Here 'A' will indicate 'Distinction', B 'Credit' and C 'Pass' and D and E 'Failure' or 'Cases Referred Back'. The values of these categories in terms of percentile marks may be determined by the examining authority. Individual examiners in defferent subjects may even use the percentile system and then convert the percentile scores in terms of categories. The system recommended here will work in almost all cases except where distinctions are to be made for the award of scholarships and prizes. In these cases (whose number will always be limited) the system may be modified to introduce a finer scale which may show the difference between two cases which may be almost similar. It must however be admitted that a difference of a few marks on the percentile scale is more often a matter of chance than of exact determination. We note that changes have been introduced in recent years in several Universities where candidates who have secured a first or second class are arranged in the alphabetical order of their names and not as hitherto according to the percentile scale.

We have discussed at some length the general principles of evaluation of school work in view of its extreme importance in education. We now come to offer certain specific and firm recommendations on the subject.

A Single Final Examination

We have referred to the desirability of reducing the number of external examinations. We recommend that there should be only one public examination to indicate the completion of the school course. It may be either the high school final examination or the higher secondary examination depending on the nature of the school where the pupil completes his course. There should be no other public examination before it. The certificate to be awarded to indicate the completion of the middle school or any other school class will be given by the school itself and it will be based entirely on the school records which will include the results of periodic and annual tests.

School Certificates

Even the final public examination need not be compulsory for all ; that is, if pupils so desire they need not take it. However, every pupil who completes the school course will get a school certificate based on school records testifying to his progress and attainments in different directions in school.

The point has been raised that the school certificate may not be reliable and that standards will vary. As regards reliability, with all the provisions we have mentioned previously we have little apprehension on that score. The only way to make the teachers' judgment reliable is to rely on them. In the beginning there may be stray cases of wrong judgment, but before long they will come to be more and more reliable and trustworthy. "No one can examine better than the teacher who knows the child, and a method of examination by the teacher, combined with school records, would be devised which would furnish a certificate giving information of real importance to employer or college or profession, and yet would preserve intact the freedom of the school and would rid teacher and pupil of an artificial restraint imposed from without. As for uniformity of standards, even under the present conditions, two apparently similar certificates mean very different things and illusory uniformity can be brought too dearly." (Norwood Committee Report on Curriculum and Examination in Secondary Schools, H.M.S.O., 1941, p, 32.)

Examination Certificate

Pupils who complete the school courses and take the final examination will get a certificate to be awarded by the authorities holding the examination. Elsewhere we have described the constitution and function of the body which will be responsible for holding the two public examinations at the end of the school course namely, the High School Certificate Examination and the Higher Secondary School Certificate Examination.

The form of these certificates needs also to be changed. Some States award a bare certificate mentioning only the division obtained by the pupil without mentioning in detail the courses taken by him. Such certificates are not very helpful either to the colleges or to the employing authorities. In one or two States however, a more elaborate form of certificate is used which incorporates not only the results of the school tests in these and other subjects which are not included in the public examination. They also contain extracts from school records. A specimen copy of such a certificate form is given in Appendix VIII. We commend this letter form of certificate in preference to the former.

Examining authorities should prescribe a form wherein the schools could fill in the details of the school record of the pupil concerned. At the time of the Public Examination the school will forward the record to the examining authority. The examining authority in its turn will enter therein the results of the Public Examination and return it to the school to be forwarded to the pupil concerned. Every candidate who appears for the examination will get a certificate, showing the school record and the public test record. The system of evaluation to be adopted by the school and the examining body has already been described.

For the final examination a candidate will ordinarily take six subjects, two from Section 'A', one from Section 'C' and three from Section 'D' of the curriculum (*vide* pp. 86-88). He may also take an additional subject as provided under Section 'E', but the result should be decided on the performance of the six subjects only. A pass in six subjects should be deemed sufficient for the satisfactory completion of the certificate Of these six subjects, at least four should have been obtained at the Public Examination, while two others may be passes obtained in the school records. If such school record passes are taken into consideration, candidates should have obtained at least one credit among the four passes of the Public Examination. In such a scheme due notice would also have been taken of the school record of the pupil.

We have indicated in a general way of the tests to be observed for certifying satisfactory completion of the school courses. It is, however, open to those concerned with the selection of pupils for higher education, university, technical or otherwise, or for those authorities which recruit for public services, to determine the exact standard of achievement required for candidates in the several subjects.

We are of opinion that as far as the final public examination is concerned the compartmental system should be introduced. If a candidate fails in one or more subjects of the public examination he should be allowed to take these subjects of public examination at a subsequent examination but in such cases the school records will not be taken into account. He need not again sit for subjects in which he has obtained a pass. He will be given not more than three chances to appear at subsequent examinations.

A candidate who has passed the examination in the required six subjects, and wishes to qualify in any additional subject, may appear at a subsequent examination. The result thus obtained will be entered by the examination authority in the certificate already obtained by the candidate.

The scheme recommended by us here for the reform of the entire system of examination and evaluation of school work should be tried for a reasonably long period of time. It takes time for such fundamental changes to be assimilated before they can work satisfactorily and before any judgment can be pronounced on them.

SUMMARY OF RECOMMENDATIONS

1. The number of external examinations should be reduced and the element of subjectivity in the eassay-type tests should be minimised by introducing objective tests and also by changing the type of questions.

2. In order to find out the pupil's all-round progress and to determine his future, a proper system of school records should be maintained for every pupil indicating the work done by him from time to time and his attainments in the different spheres.

3. In the final assessment of the pupils due credit should be given to the internal tests and the school records of the pupils.

4. The system of symbolic rather than numerical making should be adopted for evaluating and grading the work of the pupil in external and internal examinations and in maintaining the school records.

5. There should be one public examination at the completion of the Secondary school course.

6. The certificate awarded should contain besides the results of the public examination in different subjects, the results of the school tests in subjects not included in the public examination as well as the gist of the school records.

7. The system of compartmental examinations should be introduced at the final public examination.

CHAPTER XII

IMPROVEMENT OF THE TEACHING PERSONNEL

I

TEACHERS

The Need for Improving the General Conditions of Teachers

In the preceding chapters of our Report, we have referred to the various steps to be taken to improve the quality and standards of secondary education and to make it a worthy medium for the balanced development of the students' personality. We are, however, convinced that the most important factor in the contemplated educational reconstruction is the teacher—his personal qualities, his educational qualifications, his professional training and the place that he occupies in the school as well as in the community. The reputation of a school and its influence on the life of the community invariably depend on the kind of teacher working in it. Priority of consideration must, therefore, be given to the various problems connected with the improvement of their status. During our tour, we were painfully impressed by the fact that the social status, the salaries and the general service conditions of teachers, are far from satisfactory. In fact, our general impression is that on the whole their position today is even worse than it was in the past. It compares unfavourably not only with persons of similar qualifications in other professions but also, in many cases, with those of lower qualifications who are entrusted with less important and socially less significant duties. They have often no security of tenure and their treatment by management is, in many cases, inconsistent with their position and dignity. The same story of woe was repeated at almost every centre by the Teachers' Organizations and by responsible headmasters and others interested in education. It is surprising that, in spite of the recommendations made by successive Education Commissions in the past, many of the disabilities from which teachers suffer. still persist and adequate steps have not been taken to remove them. We are aware that in recent years, in many States there has been a revision of teachers' grades and dearness allowances have been sanctioned. But they have not brought adequate relief, because, meanwhile, the cost of living has risen steeply and thus nullified the concessions that had been granted. We are fully conscious of the financial difficulties of the State Governments and the fact that they have to attend simultaneously to a large number of other urgent and pressing problems. But we are convinced that, if the teachers' present mood of

discontent and frustation is to be removed and education is to become a genuine nation building activity, it is absolutely necessary to improve their status and their conditions of service.

Method of Recruitment

There seems to be no uniform system in the different States in regard to the recruitment of teachers. We have referred elsewhere to the measures that may be adopted to attract the best persons to the profession by giving them stipends and treating them as on probation during the period of training. Many schools have still a large number of untrained teachers and it does not seem to have been realised by managements that it is unfair on their part to let the students be taught by such teachers. Some managements utilise untrained teachers for short periods and then discharge them and thus circumvent the departmental rules regarding the employment of trained teachers. We realise that the training facilities available are not adequate and that a considerable increase in the number of training institutes is necessary. Still, we are not convinced that the managements have taken all the steps possible to attract trained teachers. We feel that there should be a reasonably uniform procedure for the selection and appointment of teachers and this should not be very different as between Government schools and schools under the management of private agencies. In the case of Government schools, the Public Service Commission selects teachers—as least in the higher grades—and in doing so they have the advice of the Director of Education or some other high official of the Department. In privately managed schools, however, the procedure varies from State to State and sometimes from institutions there should be a small Selction Committee entrusted with the responsibility of recruiting the staff with the headmaster as an ex-officio member. It is also desirable that a nominee of the Department of Education should be on the Managing Board. We also recommend that, in schools maintained by local boards or municipalities, a similar policy should be adopted and either the Public Service Commission of the State or a body constituted on similar lines should be entrusted with the task of selecting teachers.

Period of Probation

At present there is no uniformity in regard to the period of probation prescribed for teachers. Unless it is short-term vacancy, it is desirable that a trained teacher, appointed to a permanent post, should be on probation for one year, and after satisfactory completion of the period he should be confirmed. In exceptional cases. the managements may extend that period by one year which should be the maximum period of probation before deciding confirmation. After confirmation, the teacher should normally be continued in service till the age of retirement,

Qualifications of Teachers in High and Higher Secondary Schools

We have already stated that, so far as the high schools are concerned, only graduates with a degree in education should be appointed. We feel that at the middle school stage also it is important to have a fair number of trained graduates on the staff. It is our hope that, in course of time, education at the middle school stage will be imparted by graduate teachers, and secondary grade trained teachers will be available for primary or junior basic schools. We recommend this for consideration as a long-term plan.

In regard to the appointment of teachers for technical and technological subjects included in the diversified courses of study, the qualification should be prescribed by the departments of education after taking into consideration the requirements of the particular subject to be taught. In the majority of cases, we recommend that such teachers should be graduates in the particular subject and should have received training in teaching it.

we have noted that at presents in many schools, the staff appointed satisfy only the minimum educational qualifications prescribed. It is very desirable that at least some of the teachers should possess higher educational qualifications both in general education and in teaching.

Many Universities have given teachers, employed in recognised school, the privilege of taking the examination for higher degree after private study. As an incentive for the acquisition of such additional qualifications, we suggest that school authorities should grant some additional increments to teachers who obtain higher degrees while in service. Care must, however, be taken to see that this does not interfere with the satisfactory discharge of their normal duties.

We have recommended that the secondary school course should be extended to cover additional year and that at the end of this period candidates must be eligible for the higher secondary school certificate. This additional year of school course carries with it the responsibility for greater efficiency in teaching and for attainment of a higher standard. It is necessary before any school is recognised as a Higher Secondary school that teachers with higher qualification should be appointed to the staff. We found that in one State, whenever a school is upgraded into a Higher Secondary School, it was incumbent upon the management to have on the staff persons with higher qualifications (a Master's or Honours Degree) the number of such teachers depending upon the number of subjects taught in the school. In view of the fact that one year of the old Intermediate is to be added to the Higher Secondary Schools, we feel that the qualifications of the teachers entrusted with the last two years at the higher secondary stage should be the same as prescribed in some Universities for teachers of the Intermediate. These qualifications are the Honours or M.A. Degree or a first Class B.A. with

a degree in teaching. For the traditional period we suggest that persons employed in higher secondary schools should have these high academic qualifications and posses either a degree in Education or at least three years' teaching experience in a college. In the higher secondary schools which impart instruction in the technical and vocational subjects some of the teachers dealing with the last two years should likewise possess high qualifications in their own subjects. These may be prescribed by the special advisory committees which we have suggested for technical education.

We have referred in another chapter to the importance of properly trained teachers of languages at the school stage. If, as we envisage, students have to be taught two or more languages, the need for properly trained teachers becomes even greater. At present, in a number of schools, the language teacher is required to have a university qualification and in some States qualifications awarded by certain other bodies have been recognised as equivalent. We trust this recognition has been given with due reference to their academic standards, and that government have satisfied themselves about the courses, the methods of teaching and qualifications of staff. We feel that unless this is done, there will be wide variations in the standard of attainment of language teachers in different schools. These teachers, like the teachers of other subjects, require special training in method of teaching. In some States such training is provided for language teachers and certificates are awarded by the University or the Government. We recommend that all other States should likewise arrange for the training of graduates, oriental title holders and other persons possessing necessary linguistic qualifications.

Conditions of Service

In addition to what we have stated above there are certain other important conditions of service which merit consideration.

(*a*) *Scales of Pay*: Considerable dissatisfaction exists everywhere about the scales of pay for teachers in the different grades of schools. Certain minimum scales of pay have been recommended by successive Committees and Commissions as well as in the Reports of the Central Pay Commission, the Central Advisory Board of Education and the Kher Committee. These recommendations have not, however, been implemented and as we have pointed out, the concessions actually made have been largly nullified by the phenomenal increase in the cost of living. The problem therefore, requires urgent consideration.

Apart from the question of the actual scales of pay sanctioned, we see no justification for variations in the grades of teachers working in Government schools and in schools conducted by local bodies and private agencies in the same State. We recommend as a general principle that those who have similar qualifications and undertake similar responsibilities should be treated on a par in the matter of salary irrespective of the type of institution in which they are working. We have noted that in

some States the scales of pay are much lower than in other States. We wish to emphasise that the revision of the present scales of pay is urgent and this revision should take into due consideration the recommendations made by previous Committees during the last few years as well as the increase in cost of living that has occurred since then. Since the cost of living as well as the financial position of different States vary considerably, it is not possible for us to suggest a uniform pay scale applicable in all States. We, therefore, strongly urge that the States should appoint special Committee to review the scales of pay of teachers of all grades and make recommendations that meet in a fair and just manner, the present cost of living.

(b) *Provident Fund and Pension* : Apart from the scales of salary, the general conditions of service should be such that teachers can duly discharge their family and civic responsibilities without anxiety about their future and the security of service. At present, they are entitled to Provident Fund benefits in most of the State. The contribution made to the Fund by the teachers, the State and private management vary considerably. Generally, the teacher subscribes an amount not exceeding $6\frac{1}{4}\%$ of his salary and an equal amount is contributed by the management and the State or by the Local Board concerned, the whole amount being invested in some kind of securities and paid to him at the end of his service. Teachers who are transferred from one educational institution to another have the right to have their Provident Fund also transferred. In some States. however, an equal contribution is not made to the Provident Fund by the parties concerned.

Teachers in Govenrment service are entitled to pension as in other service of Government but not so the teachers in private schools. We have had several unfortunate cases where the sudden demise of a teacher has left the family almost penniless and the Provident Fund did not meet even the immediate need of the family. It is, therefore, necessary to think of other ways of overcoming such difficulties.

Triple Benefit Scheme for Teachers

Recently, in one of the States, a triple benefit scheme has been instituted for Government servants, called the Pension-cum-Provident Fund-cum-Insurance Scheme. We understand that this scheme has been introduced by some universities also for their employees. We feel that, if the teachers are to be relieved of worries about the future of their family, this triple benefit scheme should be made applicable to teachers in all States. The details of the scheme are given in the Appendix IX. Since the majority of the institutions are privately managed, the responsibility for the maintenance of the Provident Fund and Pension Fund account should rest with the Government through the Department of Education which will be responsible for working out the details and administering the fund.

Security of Tenure

The teaching profession in the country is much perturbed about security of tenure of office and the general conditions under which they have to work. In some States, schools have been established by managements who have no experience of educational work. There is no doubt that many managements have abused their position and treated teachers shabbily and this is probably responsible for the demand by some teachers and Teachers' Associations that all schools should be brought under the control of the Government. We have also received complaints that service conditions under local bodies have been unsatisfactory and that teachers have been subjected to humiliating treatment by the authorities concerned in the matter of transfer; termination of services, and punishments. In brief the present position of these bodies and their relationship to the teaching profession is not satisfactory. We have been told by responsible teachers and Teachers' Associations that it is not unsual for some managements to ask for "voluntary donations" from the teacher for the school. We consider it essential that all those who have to do with educational administration should recognise clearly and without any mental reservation the status of the teachers and the respect and consideration due to them. At the same time we must strongly affirm that it is the duty of teachers to set up such a high example of personal and professional integrity as to win the respect as well as the full cooperation of the management and the community.

It has also been brought to our notice that punishments are sometimes meted out to teachers inconsiderately—their services are terminated or their transfers made without adequate grounds or increments stopped without justification. While we would not suggest that an erring teacher should not incur any punishment, we feel that whenever such punishments are meted out there should be provision for an appeal by the teacher to higher authority. We are aware that, in certain States, the managements are required to report to the Director of Public Instruction certain types of disciplinary action. For this purpose, Arbitration Boards or Committees should be appointed which will have a right to look into these appeals and any grievances and to consider whether the punishment accorded. suspension, dismissal, stoppage of increments, or reduction to a lower status is justified, This board should consist of the Director of Education or his nominee, a representative of the management and a representative of the State Teachers' Association. The decision of the Board should be final, except in the case of Government servants who have the right to appeal to a high authority *i. e.* Government. Where a local board has a number of schools under the management, we deem it desirable that there should be special officer of the Education Department to look after the conditions of service of teachers employed under it. In the case of girls' schools the special officer should be a woman of the status of an Inspectress of schools. These

officers should be authorised to deal with transfers, appointments, etc., subject to a right of appeal either to the Director of Education or the Arbitration Board according to the nature of the case.

Age of Retirement

At present, the age of retirement is 55, but in private institutions, it can be extended upto 60 with the approval of the Department of Education. We feel that in view of the expanding need for qualified teachers and in view also of the improvement in the general expectation of life within recent years, the age of retirement may be extended to 60 with the approval of the Director of Education provided the teacher is physically and otherwise fit.

Other Amenities

In addition to the above specific recommendations we feel that there are certain other amenities that should be provided for the teaching profession so as to attract the right type of persons. Among these may be mentioned the following :—

(i) *Free Education of Children* : Free education upto the age of 14 is a responsibility of the Government under the Constitution. It would, therefore, be in keeping with this policy, if the children of teachers are given free education in schools. We were glad to note that in one State the children of all the teachers are given free education upto the Middle school stage, and half-free concession at the high school stage, the State compensating the managements concerned for the loss of fee on this account. We recommend this policy and suggest that the children of teachers should be given free education throughout the school stage.

(ii) *Housing Schemes for Teachers*: One of the difficulties experienced in recruiting teachers both for urban and rural areas is the lack of suitable accommodation. This difficulty is even greater in the case of women teachers, and instances have come to our notice of women teachers transferred to certain places being entirely unable to find any residential accommodation at all. We suggest that through a system of cooperative house-building societies or in other ways teachers should be provided with quarters so as to enable them to live near the school and devote more of their time to the many-sided activities of the school.

(iii) *Railway Travel Concession*: Teachers have to attend seminars and refresher courses organised by the Department of Education or by Teachers' Associations, and they should be encouraged to attend regional and All-India Educational Conferences. We were told that the railway authorities have extended certain travel concessions to them. We welcome this move and recommended that it should be widened so that teachers wishing to go to health resorts or holiday camps or to attend educational conferences, seminars, etc., be given travel concessions at half rates.

(*iv*) *Holiday Homes and Health Resorts*: One of the Teachers' special advantages is the long vacation during which they are expected to refresh themselves both in body and mind and equip themselves better for their work when the school reopens. It would be of advantage to start a nation-wide movement encouraging teachers to go to health resorts or holiday homes during the vacation. This should not be very difficult or costly, if managements and State Governments cooperate to organise such camps on a permanent basis and afford necessary facilities to teachers to spend at least part of their vacations in such camps. In some States a beginning has been made in this direction, and we would like to commend this example to other States and private managements.

(*v*) *Medical Relief*: We feel that the teaching profession should be entitled to the benefit to medical relief, free treatment in hospitals and dispensaries, and, where necessary, free accommodation in State hospitals. We were glad to learn that in one of the States, all non-gazetted officers were entitled to this concessions. The extension of this privilege to the teaching profession as a whole will be greatly appreciated and will go a long way to relieve them of anxiety.

(*vi*) *Leave Concessions*: We have stated elsewhere that the minimum number of working days in a school should be about 200. In a large majority of cases, the teacher will get the benefit of the vacation and the other causal holidays. Under certain circumstances, however, special leave may be necessary on account of illness or urgent personal work. There are three types of leave which may be considered in this connection—casual leave, medical leave, and, in the case of women teachers, maternity leave. We recommend there should be uniform leave rules for all educational institutions.

In addition to the kinds of leave mentioned above there is a great deal to be said in favour of study leave being granted to teachers. Opportunities must be given to them to visit different institutions with the country and some of them, in responsible positions, may be given study leave on full pay to go abroad, for period ranging from six months to 12 months, for higher education or to study educational work in foreign countries. Such study leave should be granted by the Centre or the State Government concerned, and the teachers selected may be either from Government or Local Boards or private schools, the chief criterion for selection being the extent to which he will gain by his study and experiences for use on his return. Study leave may also be granted to obtain higher qualifications in teaching or any other relevant subject of study.

The system of granting a "subbatical year's leave" that exists in some countries of the West may also be considered with advantage by the State and Central Governments.

The Problem of Additional Employment

The most usual form of remunerative work taken up by the teachers out of school hours consists of private tuitions. This practice of private tuitions has unfortunately assumed the proportions of an educational scandal. We are satisfied that it is attended with several evils and steps should be taken to abolish it as early as possible. In view of the recommendations we have made for the improvement of the conditions of service, we believe it will become increasingly unnecessary for teachers to take up private tuitions to supplement their income. We are aware that some students require special coaching to keep pace with other children but the right way of dealing with that situation is that the school should itself make provision for extra tuition to such backward children at fixed hours charging extra fees for the purpose, if necessary.

We do not wish to make any definite recommendations in this matter but would leave to the State to consider whether, consistently with their school duties, some of the teachers in the rural areas could not be utilised for other local duties like Post Office or Rural Reconstruction Work such as being carried on the Community Projects on a remunerative basis. In view of the paucity of educated persons in rural areas this kind of part-time employment may enable the teacher to perform some useful work for the local community and earn some additional income.

The Teachers' Status in Society

We have already referred to the importance of the teacher's social status. There is a growing feeling that the lead in this matter should be taken by persons in high public positions who should show special recognition of the status and dignity of teachers and treat them not on the basis of their salary and economic status but on the importance of the nation-building work that is entrusted to them. If they do so, society would follow their example in due course. At important public and ceremonial functions, the head of the State or the Ministers or the District Officer concerned should invite representatives of the teaching profession and gives them a position of honour. Many in the profession have shown outstanding merit in their work and are entitled to receive due recognition of it from the States as well as from the society. They must also be consulted in all important matters pertaining to education so as to strengthen their sense of professional responsibility.

The Headmaster

Special mention must be made of the position of the headmaster in a school. On him the proper working of the school ultimately depends. The reputation of a school and the position that it holds in the society depends in a large measure on the influence that he exercises over his colleagues, the pupils and their parents and the general public.

Similarly the discipline of the school and its *esprit de corps* are his special responsibility. He also holds an important place in the life of the community, where he can exercise a very healthy influence. By his contact with parents and the general public he can help to forget that link between the school and the larger community which we have repeatedly stressed. He is also responsible for carrying out the policies and programme of the Department of Education and he acts as a liaison between it and the management or the general local community.

From all these points of view the choice of Headmaster of the school is of particular significance. By his attainments and qualifications, his previous record as a teacher, his social aptitudes, he should be able to command the confidence of his colleagues, and the public and the respect of his pupils. We believe that seniority is frequently not the best criterion in the choosing of a headmaster. It is more important that he should possess the other conditions and qualifications that we have mentioned as necessary for such a high and responsible post. The special qualifications to be stressed in addition to the academic and professional are teaching and/or administrative experience of at least ten years and qualities of leadership and administrative ability.

We believe that to attract people of the right type to so responsible a position, the emoluments of the post should be sufficiently attractive. For this purpose a special scale of pay or an allowance in addition to his salary should be given. To enable him to discharge his duties efficiently the number of students in the school must be limited. We have stated elsewhere that the optimum number in a school is 500 and the maximum 750 except in certain multipurpose schools where it may be 1,000 and where headmaster should have a deputy to look after vocational side or the general side as the case may be. Where the number exceeds this limit, a senior teacher should be designated as Assistant Headmaster and certain duties of the headmaster should be delegated to him. It is of the utmost importance however that headmaster should have opportunities of getting into contact with all the pupils in the school, to scrutinize their records, to get to know the parents and to participate in the co-curricular and the community activities of the school.

In conclusion, we should like to reiterate that the whole question of educational reconstruction hinges on the success of the Department and the community in winning over the wholehearted cooperation of the teachers. For this purpose, the necessary climate of opinion must be created. This should be done not only through the various measures that we have recommended for improving their economic and social status but also by organising nation-wide conferences, study groups, discussions and seminars at which creative ideas about educational reform may be discussed and popularised.

II

TEACHER-TRAINING

Importance of Training of Teachers

Having considered the general questions relating to the improvement of the teachers' status it is necessary to devote special attention to the problems of their training. It has been noted that there are considerable variations in regard to the teacher-training programme in different States and also that the number of institutions for teacher-training is very inadequate compared even to the present needs. Moreover, the prospects of teaching profession are not satisfactory enough to attract sufficient number of candidates to join the teacher-training institutions.

Type of Teacher-Training Institutions

Broadly speaking, the existing teacher-training institutions may be classified under three heads :—

(*i*) Primary (or Basic) Teacher-Training ;

(*ii*) Secondary Teacher-Training ; and

(*iii*) Graduate Teacher-Training Institutions.

The Primary (or Basic) Teacher-Training Institutions are intended for teachers of Primary or Junior Basic schools. The general educational qualification of these teachers varies from State to State, but on the whole it is not high. In some States they should have read up to the third form or the eighth standard of the High school or they should have completed the higher elementary course. Thereafter they are given one or two years' training and are then expected to teach in elementary or primary or junior basic schools as they may be variously called.

Need for Better Equipped Teaching Personnel

It is an accepted principle that teaching in the lower standards and especially in infant classes in the primary grades requires as much, if not more, preparation as in the High schools and that the lower the grade of pupils the greater is the skill required to teach them. In the course of our tour, we have observed with pleasure in some Nursery schools and Primary schools conducted by private agencies to what extent the quality of teaching improves when educated and well-trained persons are in charge. We have seen how the boys and girls in these schools are not merely given training in the three 'Rs', but are also trained in habits of life and social conduct and in some elementary craft work which helps in the development of personality and creates in children a

healthy interest in and a love for education. These principles are no doubt implemented in what is known as the basic type of education. The point to be emphasised is that proper education at this very early stage is not possible with the type of teachers as are now accepted for Primary schools. If a good foundation is to be laid at this most impressionable stage, efforts should be made to see that better equipped and better trained teachers are available. We are, therefore, of the opinion that the minimum general educational standard for all Primary school teachers should be the School Leaving Certificate and that their period of training should extend over two years and it should consist of training both in general as well as in the professional subjects.

In our opinion, there should be only two types of institutions for teacher-training : (1) for those who have taken the School Leaving Certificate or the Higher Secondary School Leaving Certificate as envisaged by us, and for whom a two-year teacher-training should be required ; and (2) for graduates for whom a training should be, as at present, of one academic year. We suggest as a long-term programme that graduate teachers should have their training extended to two academic years ; but we realise that both financially and in view of the number of teachers required and also because the teachers themselves can ill spare two years for such training, this is not immediately possible.

Graduate to First-Grade Teacher-Training

In regard to graduate teacher-training, we are definitely of the opinion that institutions for this purpose should be recognised by and affiliated to the Universities and the diplomas and degrees should be granted by the Universities and not by the State Departments of Education or by *ad hoc* bodies. In some States, it would appear that some graduate teachers obtains as their training qualification a degree awarded by a University while others obtain for the same purpose a diploma given by the State Departments of Education. We consider that the maintenance of two standards in training is wholly unnecessary. It is not desirable that the States through their departments of Education should conduct tests and grant diplomas at this stage. Graduate training being a post-graduate qualification should come under the University and when there are Universities carrying on this function, all graduates should be trained in institutions which are affiliated to the Universities, and submit to tests conducted by the University. As for the other type of teacher-training institutions, they should be under the control of a separate Board appointed for this purpose and not under the Department of Education, We shall refer to the constitution and functions of such a Board later. In some States even these are under the control of the University ; but we do not think that the University can effectively supervise and guide the large number of such institutions catering for many thousands of teachers

Secondary-Grade Training

In the Secondary-grade training institutions for which we have recommended a two-year course, the first year will be devoted largely to general education. The student-teachers' interest in teaching should be stimulated by visits to schools, discussions and some amount of teaching practice under supervision. In the second year, special subjects pertaining to pedagogy and the practice of methods of teaching should form a large part of the curriculum, Secondary-grade trained teachers should largely be employed for the Nursery schools and the Primary or Junior Basic schools. While every one of them may probably be given training to deal with general subjects in these different types of schools, some should have special training in one or other of the following :—

(*a*) Nursery-school education.

(*b*) Craft education and principles of craft-centred education.

(*c*) One or other of co-curricular activities.

The general approach to co-curricular activities will be taught to all, but one or two of these co-curricular activities should be more intensively taken up by the student-teachers for a limited period of training, say for eight or 12 weeks. The object of the special training in such co-curricular activities like Physical education, scouting and guiding, first-aid, excursion, library organisations etc., is to provide teachers specially trained to organise these activities.

Graduate-training

Graduate-training is restricted to one year, and although we have recommended as a long-term programme the desirability of increasing this period to two academic years, we realise that it cannot be thought of in the immediate future. During this one year of training, the graduate teacher should be trained in methods of teaching at least two subjects. The subject so chosen should have been studied at least up to the Intermediate or Higher Secondary Certificate standard. This point is important. For we are told that in many instances graduates with a combination of subjects which have nothing to do with schools come for training. Such graduates, even with training, can hardly make good subject-teachers. They should, therefore, be discouraged from joining the teaching profession.

Practical Training

The importance to be attached to teaching practice in schools cannot be over-emphasised. We believe that it will be conducive to sound training if every Teacher-Training College has a demonstration school—more commonly called a model school—as well as a certain

number of other schools at a reasonably near distance associated with it for purposes of practical training. These schools themselves should have trained graduate teachers on the staff. We do not propose to enter into the details in regard to the nature of the training that is to be imparted but we wish to emphasise that at present the practical training for student-teachers is very limited and in some places almost non-existent. There is one point, however, which should be mentioned in this connection. The practical training should not consist only of practice in teaching, observation, demonstration and criticism of lessons, but should include such subjects as construction and administration of scholastic tests, organisation of supervised study and students' societies, conducting library periods and maintenance of cumulative records. We feel that the scope of teacher training, particularly n ts practical aspects, should be broadened to include some of these activities that a student-teacher will be expected to perform when he becomes a full-fledged teacher.

One aspect of such specialised training deserves attention. The training of teachers of handicapped children concerns not only the physically handicapped but also the mentally handicapped children. Teachers of mentally handicapped children also need very special kind of training in which problems of mental disorders and mental hygiene should figure prominently. It would, however, be an advantage if all teachers are initiated during the training into the general principles of mental hygiene because of the insight it provides into the behaviour problems of even ordinary children. In fact we are of opinion that mental hygiene should receive greater emphasis than it at present does in the teacher-training courses at all levels.

As regards the assessment of a teacher's practical ability, we realise that it is not possible for large numbers to have an examination test in practical training conducted by an outside agency like the University, but internal tests by the staff should be required in all cases, supplemented where necessary by sample tests by the Board of Examiners conducting the University examination.

Training in Co-Curricular Activities

In view of the importance we attach to co-curricular activities, to which reference has been made elsewhere, every student-teacher should have special training in one or other or the co-curricular activities in a manner we have suggested for secondary-grade trained teachers. The object of this training is not to supplant the fully trained personnel, but rather to supplement their activities and to give them valuable assistance in this respect. Thus, a short course of training in school librarianship will enable the teacher concerned to give valuable assistance to the trained librarian of the school. Likewise, training in Physical education will enable the teacher to cooperate with the medical officer, and with the

physical education teachers in looking after the physical welfare of the school children. So far as medical care is concerned we have in another place referred to the fact that student teachers can be given a short period of training in regard to certain fundamentals of school health and care of the children ; we have also stated that school teachers so trained would form a useful link with the other trained staff in looking after the health and welfare of the school children. Each training institution must develop along these lines so as to supplement the usual teacher-training programme by intensive courses over short periods for teachers with particular aptitudes in any of the co-curricular activities. Likewise training in school administration, Audio-visual education, school broadcasts, Social education, scouting and guiding, citizenship training, Junior Red Cross as well as training in conducting students' clubs, debating societies, etc. and in organising social service and community life can be given to the student-teachers. Many of these activities require a good deal of knowing and preparation if they are to be effectively utilised in the school programme.

In-Service Training

However excellent the programme of teacher-training may be, it does not by itself produce an excellent teacher. It can only engender the knowledge, skills and attitudes which will enable the teacher to begin his task with a reasonable degree of confidence and with the minimum amount of experience. Increased efficiency will come through experience critically analysed and through individual and group efforts at improvement. The teacher-training institution should accept its responsibility for assisting in this in-service stage of teacher-training. Among the activities which the training college should provide or in which it should collaborate are: (1) refresher courses, (2) short intensive courses in special subjects, (3) practical training in workshop, (4) seminars and professional conferences. It should also allow its staff where possible to serve as consultants to a school or group of schools conducting some programme of improvement.

Liaison Between Training Institutions and Other Agencies

Training Institutions should be in close liaison with the Department of Education and the schools. Such close relationship will be fruitful in many ways specially in regard to the placing of student-teachers. Except in the case of deputed teachers, training institutions are not now in a position to do anything for placing other students in educational institutions. It would be to the advantage of all concerned if training institutions could keep in touch with their alumni and follow their subsequent careers. In recruiting teachers, therefore, training colleges should be consulted by the department as well as by the agencies.

Training Colleges and Research in Education

One aspect of the training college should not be lost sigh of. The training college should in essence be not merely a college for training teachers, but an institution for research work in all aspects of pedagogy.

The staff of the college should be such as would be capable of devoting some of their time to research in curricular and extra-curricular activities, general administration, modern trends of pedagogy and also from time to time in research to evaluate results of the particular method of training adopted in different schools. For this purpose every training college desiring to conduct educational research should have under its control an experimental or demonstration school besides the practising schools already mentioned.

Training in Special Subjects

There are certain special types of training which are being given in different institutions. Physical education, for instance, is at present given in specialised institutions for the purpose. Likewise, training for handicapped children, for deaf-mutes and the blind are given in separate institutions. Rightly so, for the effectiveness of the training will be preserved only if given in institutions where the principles of pedagogy in relation to these particular subjects concerned will be given due emphasis.

Recruitment to Training Colleges

Recruitment to Training colleges should be carefully made so as to admit only those who hold the highest promise of becoming successful teachers. Admission should generally be after carefully devised tests and interviews. We cannot afford to waste money on training people who have not the making of good teachers. We have had enough evidence to show that in many places it has not been possible to recruit a sufficient number of trainees to meet the needs of the schools in the State. Even where a sufficient number of recruits is available, they seldom possess high qualifications. This is no doubt owing to the present very unsatisfactory position of teachers' status and emoluments. As long as the conditions of service and salary are so unattractive and the status of teachers remains low and unimportant compared with other learned profession, there is no possibility of drawing large numbers of really qualified, enthusiastic and devoted candidates to join the profession. We have referred elsewhere to the urgent need of improving the conditions of teachers in all these respects. There is one other aspect of the question, however, which we wish to emphasise at this stage. There is great diversity in regard to the terms offered to student-teachers in the different training institutions in the States. In some institutions the training is given free ; in others a fee is charged. Taking into consideration the

need for a very large number of teachers and also the need for attracting the right type of teachers to the profession, we recommend that no fees should be charged in Training colleges and all student-teachers should be given suitable stipends by the State during the period of training. This was the practice some years ago. We also suggest that teachers already in service should be given, during the period of training, the same salary which they were getting. They should, however, under such circumstances, be expected to execute a bond to serve as teachers for a period of five years. This will apply both to graduate teachers and to second-grade teachers.

We have suggested that young pupils who show promise of developing into good teachers should be recruited. We wish to point out that the teachers themeselves are potentially recruiting agents *par excellence.* By their attitude towards the public and the students, they are daily recruiting young people into or out of the profession. At the upper Secondary school level and in the undergraduate colleges, teachers can perform an outstanding service to students and the profession if they actively encourage young people who possess intelligence and other characteristics which may lead to success in teaching, to consider teaching as their career. Such students, after graduation, may serve for some period in some school and acquire practical experience before going in for professional training.

Preparation of Teachers before Admission and Duration of Course

In view of the comparatively short duration of the training course at present, it is suggested that the selection of the students for teacher training may be made some months in advance of the opening of the course. The majority of candidates will be those who are already teaching or who have settled on teaching as their profession. During this period, they may be given opportunities to study some selected books recommended by the Training colleges concerned, so that when they come for training they will have some information as a background for the study they are to launch upon. We suggest that the period of training may be increased to a minimum of 180 days by eliminating the number of unnecessary holidays. Within this period, it should be possible for the students to have practical training in schools and to have the theoretical training in the subjects concerned and some training in a few of the co-curricular activities.

Residential Training Colleges

There is one aspect of the life of the student-teacher which we wish to emphasise. We believe that the time at the disposal of the student-teacher, whether in the second-grade or the graduate-grade, is so limited that his whole time should be devoted to the study of various aspects of education, school life, community life, administration,

etc. Life in the training institutions should be a guide to the activities in the school with the pupils. We wish, therefore, to emphasise that this community life in the training institutions, the devotion to the various activities that can be attempted in such institutions and the mixing of the student-teacher themeselves in all social and useful activities both in the school community as well as in the community life of the area where the school is situated, would best be promoted by a residential system of training. We, therefore, strongly advocate a residential type of training institutions for all students. Such residence will train them in self-reliance, provide a certain amount of manual labour and cultivate community life within and outside the school premises. We expect them to manage their own hostels, to take turns in the different kinds of work connected with the kitchen and the dining room, to be responsible for the general cleanliness of the institution, and thus to develop habits of healthy and active living and sense of the dignity of labour.

Post-Graduate Course in Education

We have referred to research in training institutions. This brings us to post-graduate training in Education. We feel that there is scope for post-graduate courses in Education and we are glad to note that in some of the universities a post-graduate degree, the Master of education, has been instituted. A clearer conception of what is intended by the Master's degree in education seems to us to be required. This degree is primarily intended for higher studies in pedagogy : (1) to give ideas through the study of comparative education of modern methods that are being followed in different countries, (2) to cultivate aptitude for research so that experiments on new methods and techniques of education suited to the country and the community may be undertaken, (3) to afford opportunities for specialisation in one or other of the branches of study pertaining to (*a*) the curricular of school studies, (*b*) craft-centred education, (*c*) co-curricular activities, etc., and (4) to train teachers for higher grades in the profession such as the headmaster, the inspectorate, and teaching staff of training institutions. In fact this higher education should be designed to inculcate the qualities of leadership in education.

At present the Master's degree can be taken immediately after the first degree in education. Owing to the limited number of seats the selection is more often made from those who have had experience as teachers subsequent to their first degree in teaching, but it is not limited to such. We believe that it would be an advantage if for this higher degree in education trained teachers who have done normally a minimum of three years teaching in a school are only selected. It is desirable that a certain number of scholarships should be made available for such teachers for the period of study they have to put in for the higher degree and that the teachers concerned may be selected after

consideration of their qualifications, their record as school teachers, their aptitude for research shown by any contribution that they may have made, their general personality and their conduct in the profession.

Staff of Training Colleges

From what has been stated above, it seems obvious that care should be taken in selecting the staffs of training colleges, whether for the second grade institutions or the first *i. e.*, graduate training colleges. We believe that there should be a picked staff of teachers possessing (i) a good general educational qualification; (ii) a degree in teaching; and (iii) at least five years of experience as a teacher in school. An additional qualification may be three to five years experience as an Inspector. In the case of second grade training institutions, the minimum qualification should be a first or second class Bachelor's Degree with an L. T. or B. T. qualification. In the case of graduate training institutions. the minimum qualification should be (i) an Honours or Master's degree, or a first class B. A. or B. Sc. degree in the particular subject, (ii) a professional qualification—a Master of Education degree with three years' teaching experience, or an L. T. or B. T. degree with five years' service as an inspector or headmaster. We are of opinion that there should be a free exchange between professors in training colleges on the one hand and selected headmasters of schools and Inspectors of the Education Department on the other, and that for varying periods of three to five years there should be a possibility of sending one or other of these to any of the posts mentioned herein. Professors in training institutions should be enabled for short periods to take up the duties of headmasters or Inspectors so that they may become familiar with the actual conditions of school life and realise how the training that is imparted by them in the Training colleges is actually put into practice.

We agree that so far as the nursery and primary stages of instruction are concerned, women are better teachers than men. In regard to Middle schools also a considerable body of opinion is in favour of giving ample opportunities for women to be employed as teachers in these institutions. We agree with this view. In girls' schools obviously women should be the teachers. We have been forcibly impressed by the fact that the education of girls has much leeway to make up. The facilities available for girls in many States are very much limited. A rapid expansion of girls' education depends to a very large extent upon the availability of women teachers. We have examined this question very carefully and have come to the conclusion that under present conditions, it will not be possible to recruit adequate number of women student teachers in the existing training institutions. We feel therefore that special efforts should be made in this direction. As a short-term policy, at any rate, we would recommend part-time courses being made available to women who could spare a little time and who with the appropriate

training take up teaching as part-time workers. Such part-time training may be in the mornings or in the evenings but necessarily the total period of training will have to be extended. We suggest that three years may be the period for second grade teachers, and two academic years for graduate teachers. The question may be raised as to how they could have practical training on a part-time basis. We think that for the limited time for which this practical training is needed it should not be difficult to arrange it in such a manner that they can spend their time in the schools concerned. These part-time student-teachers should also be eligible for some stipend during their period of training and if such stipend is given they should undertake to perform the duties of a teacher for a minimum period of three years.

We shall refer to the employment of women as teachers in another part of our Report. We are of opinion that women may be employed as part-time teachers after training and much help may thus be obtained from them if a little more care is devoted to the manner of their employment as part-time teachers.

We would like to stress, in conclusion, the importance of the Training colleges assuming the role of leadership, in the task of educational reconstruction. Our impression is that they have not so far been able to do so. They should become active centres not only of research but of practical experiments directed to the improvement of educational methods, curricula, discipline and organization of schools. They should, in the first instance, successfully work out new ideas in their own Demonstration Schools and then, through the example of the school as well as the training given to their students, this influence should permeat into all institutions of the State. At present their work is greatly vitiated by the fact that there is considerable divorce between their theory and practice and the educational ideas advocated in the lecture room are not actually translated in practice in the schools under them. In order to overcome this difficulty, it would be an advantage if each Training college could be given the responsibility of supervising the work of a certain number of schools in the neighbourhood, which would,on the one hand, improve their standards and, on the other, enable the members of the staff to give practical shape to their ideas: We are convinced that, if the Training colleges could be organized on right lines and become dynamic centres of progressive educational movements, the whole task of educacational reconstruction would be greatly facilitated.

SUMMARY OF RECOMMENDATIONS

Improvement of the Teaching Personnel—

1. A reasonably uniform procedure should be devised for the selection and appointment of teachers for all types of school.

2. In all privately managed institutions and in schools maintained by local boards there should be a small Selection Committee entrusted with the responsibility of recruiting the staff, with the headmaster as an ex-officio member.

3. The normal period of probation for a trained teacher should be one year.

4. Teachers working in High Schools should be graduates with a degree in education ; those who teach technical subjects should be graduates in the subject concerned with the necessary training for teaching it ; teachers in Higher Secondary school should possess higher qualifications, somewhat similar to those prescribed in some Universities for teachers of the Intermediate colleges.

5. The teachers possessing the same qualification and performing the same type of work, should be treated on a par in the matter of grades of salary irrespective of the type of institution in which they are working.

6. Special Committees should be set up to review the scales of pay of teachers of all grades and recommend such scales of pay that will meet in a fair and just manner the varying cost of living.

7. In order to relieve teachers from anxieties about their own and their dependents' future which will affect the efficiency of their work, the system of triple benefit scheme, pension-cum-provindent fund-cum-Insurance, should be introduced in all States.

8. Arbitration Boards or Committees should be established to look into the appeals and grievances of teachers and to consider matters relating to suspension, dismissal etc.

9. The age of retirement in the case of physically fit and competent teachers may be extended to 60 with the approval of the Director of Education.

10. The children of teachers should be given free education throughout the school stage.

11. Through a system of cooperative house building societies, teachers should be provided with quarters so as to enable them to live near the school and devote more time to many sided activities of the school.

12. Teachers wishing to go to health resorts or holiday camps or to attend educational conferences, seminars, etc. should be given travel concessions and leave facilities.

13. They should be given free medical attention and treatment in hospitals and dispensaries.

14. The leave rules should, as far as possible, be uniform for all educational institutions.

15. Opportunities should be provided on a generous scale for teachers to visit different institutions within the country and in special cases to go abroad on study leave for higher studies.

16. The practice of private tuition by teachers should be abolished.

17. Persons in high public position should give special recognition to the teachers' social status and the dignity of their profession.

18. In order to attract persons of the right type to the responsible position of the headmaster, the emoluments of the post should be made sufficiently attractive.

Teacher Training

19. There should be only two types of institutions for teacher-training : (i) for those who have taken the School Leaving Certificate or Higher Secondary School Leaving Certificate, for whom the period of training should be two years ; and (ii) for graduates for whom the training may, for the present, be of one academic year, but extended as a long term programme to two academic years.

20. Graduate teacher-training institutions should be recognised by and affiliated to the Universities which should grant the degrees, while the secondary grade training institutions should be under the control of a separate Board appointed for the purpose.

21. The teacher-traininig should receive training in one or more of the various extra-curricular activities.

22. The Training colleges should, as a normal part of their work, arrange refresher courses, short intensive courses in special subjects, practical training in workshop and professional conferences.

23. The Training college should conduct research work in various important aspects of pedagogy and for this purpose it should have under its control an experimental or demonstration school.

24. No fees should be charged in Training colleges, while during the period of training all the student-teachers should be given suitable stipends by the State ; the teachers who are already in service should be given the same salary which they were getting.

25. All Training colleges should provide adequate residential facilities so as to be able to arrange community life and other suitable activities for the trainees.

26. For the Master's Degree in education only trained graduates who have normally done a minimum of three years' teaching should be admitted.

27. There should be a free exchange between professors in Training Colleges, selected Headmasters of Schools and Inspecting Officers.

28. In order to meet the shortage of women teachers, special past-time training courses should be provided.

CHAPTER XIII

PROBLEMS OF ADMINISTRATION

I

ORGANISATION AND ADMINISTRATION

In any scheme of educational reconstruction which envisages a arge scale development of educational institutions of diverse varieties, it is necessary to consider carefully the administrative machinery that should be responsible for the speed of education and for its orderly development.

The present administrative set-up is that in all States there is a Directorate of Education working under the direct control of a Minister who has a Secretary to assist him at the Secretariat level and a Director of Education as the executive head of the Department responsible for offering technical advice to the Minister in all educational matters and for carrying out the policy of the Department. In actual practice, the Director of Education has to submit his proposals for the reorganization and expansion of education to the Minister through the Secretary. This has actually meant that such proposals and policies are subjected to criticisms by the subordinate officers of the Secretariat and are often presented in a form which may be quite different from what was originally conceived by the Director. The Secretary himself may not be fully conversant with these problems as he is frequently transferred from one Department of the Secretariat to another. If education is not to be treated as a mere administrative problem, we feel that the Director of Education should be mainly responsible to advise the Minister and, for this purpose, we recommend that where the Director himself is not the Secretary of the Department he should have the status of a Joint Secretary and should have direct access to the Minister. It would, of course, be open to the Minister, when he considers it necessary, to consult the Secretary particularly in regard to administrative and financial matters.

Need for Coordination

We have noticed that in the States as well as at the Centre, different Departments and Ministries have responsibility for various aspects of education for the age period of 10 to 17. Thus, while the Department of Education is responsible for most of the activities connected with school education, there are other Ministries which have their own organization for imparting education of particular types. The Ministry of Agriculture, the Ministry of Industry and Commerce, the Ministry of Transport and Communications and Ministry of Labour, both at the Centre and the

States, have under their control, schools of different kinds which cater to the needs of this age group. It has often happened that these different Departments are not in touch with one another's activities nor is the Education Department in a position to co-ordinate them with a view to increasing efficiency and securing economy of effort. It seems, therefore, necessary that there should be a co-ordinating agency and that problems of a similar nature pertaining to more than one Ministry or Department should be discussed by them thoroughly and a concerted programme of education should be formulated. In some cases, the Departments mainly responsible for producing technicians, have not utilised their resources adequately for the furtherance of technical education by starting suitable types of technical schools. The Department of Transport and Communications, for instance, maintains a few secondary schools of the usual type for the children of its employees. In our view the responsibility for training technicians of various grades should be shared by the Central Department of Railways along with other allied Departments. This Department has a large number of workshops, and it is intended that in course of time India will become self-sufficient in the production of railway engines and all varieties of rolling stock and other necessary equipment. It is also desirable that there should be an efficient service for repairing, overhauling and the maintenance of all rolling stock and engines. We are aware that a certain number of apprentices are trained for employment in the railways, and that in some of the central workshops, work connected with the manufacture and repair of engines and rolling stock is being carried on. But if trained personnel of the required standard and in sufficient numbers is to be available, the facilities need to be expanded and improved. Since the railways are the largest employers of technicians of all grades, it should be one of their main functions to maintain or help in the maintenance of technical schools of different grades to train skilled labour for their work.

Again during the war, the Department of Commerce and Industry in the Central Government was responsible for starting a number of training institutions for technicians, and many available workshops in the country were utilised for the purpose. Since the conclusion of the war, a few institutes originally started for this purpose, have been kept going by the department where training is given in the craft or trade concerned but no provision has been made for general education. In the co-ordinated programme of technical education at this level, agriculture has also a large part to play. It seems to us that such Departments should pool their resources and adopt a uniform policy in regard to the training of various types of skilled workers needed for the different industries of the country. We may recall here what we have already stated that in all schemes of technical education, there should be room for an adequate amount of general education without which it is not possible to give

intelligent training in technical skill. Moreover, the object of all education at this stage whether technical or general is to ensure that all educated youths are also trained for the efficient discharge of their duties as citizens.

Committee of Ministers

In view of all these considerations we recommend that there should be a Committee constituted at the Centre as well as in the States consisting of the different Ministers concerned with the various types of education as well as the Minister for Finance. They must meet and discuss how best the resources of the Departments could be pooled for the furtherance of the educational programme. The Minister of Education may be the Chairman and the Director of Education, the Secretary of the Committee.

Coordinating Committee of Departmental Heads

At the next level, there is need for a co-ordinating Committee consisting of the departmental heads concerned with the various aspects of education. Here we suggest that heads of Departments responsible for education, general, technical, agricultural, commercial and other types, should meet and discuss the working of the existing machinery and the possibilities of its expansion and improvement. The Director of Education may be the Convener of this Committee and a Deputy Director of Education may act as Secretary. If there is a Deputy or Joint Director of Technical Education, he should be a member of the Committee. This Committee will have to meet several times a year to review the position and to consider methods of improvement and expansion in all relevant fields. At the outset the Committee should review the whole educational structure and draw up a master plan showing how the necessary integration can be achieved smoothly and expeditiously in the different types of schools established by the State or Centre. The whole object of this planning would be to avoid duplication , to improve and expand the facilities needed for the different educational institutions and to use them more effectively by their coordination or merging, and to lay down a programme under which special types of education may be progressively provided either in separate institutions or in multi-purpose schools. Any Department of the States or Centre which is interested in developing a particular branch of education should place such proposals before this Committee. It will thus afford an opportunity for getting an over-all picture of the whole field of education and enable the public and the State to know exactly what is being done and what are the plans proposed for the future.

Director of Education

The Director of Education should be assisted in his work by a number of experts, including a Joint Director of Vocational or Technical

Education to give expert advice on Technical Education. The various Deputy Directors should deal with particular aspects or grades of education and there should be a Deputy Directress of Education, whose chief responsibility should be to look after the education of girls and to see to it that adequate facilities are provided for them in the educational system of the State. She should also be responsible for the development of women's education and for advising on their special needs and problems.

Board of Secondary Education

We recommend that there should be a Board of Secondary Education under the chairmanship of the Director of Education to deal with all details of education at the secondary stage (general and technical). This board should be composed of persons with wide experience and knowledge of different aspects of secondary education. We recommend that it should consist of not more than 25 members, ten of whom should be specially conversant with matters pertaining to vocational or technical education.

We suggest the following constitution for the Board which can, of course, be modified to suit special needs of the States concerned.

The Joint Director of Vocational Education.

The Director of Agriculture.

The Director of Industries.

One Head of a Polytechnic.

Two representatives nominated by Government from the senior teaching staff of Vocational Schools.

The Deputy Directress of Women's education.

Four Headmasters of High Schools, including Headmasters of multi-purpose schools, nominated by Government.

Two representatives of Provincial Secondary Teachers' Association, elected by the Executive of the Association.

Five nominees of the Universities of the region, of whom two shall be professors dealing with technical education.

Two distinguished educationists coopted by the other members of the Board.

Two persons nominated by the Department and a Principal of a Training College nominated by Government.

One of the Deputy Director as a Secretary-member.

Functions of the Boards

The Boards will be generally responsible for the following matters :

(1) To frame conditions for recognition of High Schools, Higher Secondary Schools and the qualifications of the teaching staff.

(2) To appoint Committees of experts to advise on the syllabuses etc., for the different courses of study,

(3) To frame courses of study on the recommendation of Expert Committees that may be appointed for this purpose,

(4) To draw up panels of Question Paper Setters, Chief Examiners and Assistant Examiners.

(5) To frame rules prescribing the minimum conditions for selection of examiners, assistant examiners, etc., and generally to frame such other rules as may be necessary for its effective functioning.

(6) Generally to advise the Director of Education when required on all matters pertaining to secondary education.

In this connection we wish to point out that in some States, the Boards which have been recently constituted for the purpose are unwieldy in number and some of the interests represented on it are not likely to promote efficiency or harmony. We consider that, if secondary education is to progress on right lines, the Board must be a compact body mainly composed of experts, whose functions will be limited to the formulation of broad policies. The Board is not expected to function as an executive body which is the province of the Director of Education.

With regard to the conduct of examinations, we recommend that a small committee of the Board consisting of not more than five members, should be appointed with the Director of Education or a Senior member of the Directorate as Convener. This committee will be responsible for framing its scheme and conducting public examinations and for publishing results. The Director will be assisted in this work by a Senior Officer with the necessary staff to carry out the day to day duties and responsibilities in this connection and to attend to all the details concerning the conduct of examinations.

The executive powers needed to implement the recommendations of the Secondary Education Board will be vested in the Chairman of the Board, the Director of Education. This Board shall ordinarily meet at least twice a year, but may meet on other occasions when summoned by the Chairman or on a requisition made by 1/3rd of the members constituting the Board.

It will have its own office and establishment with a whole-time office Secretary for that purpose.

Board for Teacher Training Institutions

We have referred to the need to establish many new institutions to train teachers in general as well as in vocational subjects. While the training of graduates will be arranged in University Colleges, the training of under-graduate teachers will be carried on in a large number of centres for the supervision and guidance of which we recommend the establishment of a Board that will lay down the conditions necessary for their proper training. It should also be empowered to suggest for the consideration of the Universities any improvements that may be needed in the graduate training programme.

Regarding the conditions of this Board, we suggest that the Director of Education will be the Chairman with the following as members :

(1) The Joint Director of Education (Technical.)

(2) Two heads of secondary grade training institutions.

(3) Two headmasters or headmistresses of schools, one of whom will be connected with vocational education.

(4) A principal of a Polytechnic.

(5) Three persons nominated by the Government, one of whom at least shall have experience of vocational education.

(6) A dean of the faculty of teaching and another representative of the Faculty nominated by the Vice-Chancellor or Vice-Chancellors of the Universities in the State.

The functions of this Board would generally be as follows :

(1) To frame schemes and syllabuses for the training of under-graduate teachers.

(2) To draw up the conditions for recognition of such secondary grade training centres.

(3) To draw up schemes of examinations for these teachers.

(4) To draw up qualifications necessary for the teachers of the different subjects in the training institutions.

(5) To appoint expert Committees wherever necessary and to advise the Board on the schemes of special training necessary in the different vocational subjects of study.

(6) Generally to advise the Director of Education when required on all matters pertaining to teacher training.

Central Advisory Board of Education

The Central Advisory Board of Education constituted by the Central Government has been functioning for many years in order to advise the Central Government and incidentally the States on all matters pertaining to education at different levels. Composed as it is of representatives of all educational interests as well as States, its deliberations have been very useful and its reports have furnished valuable material both for the States and the Centre. We are of opinion that such a body should continue to function as a coordinating agency to consider All-India problems concerning education.

Provincial Advisory Boards

We recommend that Provincial Advisory Boards should be constituted in all States to advise the Department in all matters pertaining to education. The Board may function on lines similar to the Central Advisory Board of Education and should be composed of representatives of the teaching profession, the Universities, Managements of High Schools and Higher Secondary Schools, Heads of Departments dealing with different spheres of education, representatives of Industry, Trade and Commerce, and the legislature and the general public. The Minister of Education should be the Chairman of the Board and the Director of Education or the Education Secretary should be the Secretary. This body will advise the Department of Education on all matters pertaining to education, particularly its improvement both in the quality and quantity.

II

SUPERVISION AND INSPECTION OF SCHOOLS

Existing Defects

The present system of inspection of schools was subjected to criticism by several witnesses. It was pointed out that inspections were perfunctory, that the time spent by the Inspector at any particular place was insufficient, that the greater part of this time was taken up with routine work like checking accounts and looking into the administrative aspects of the school. There was not enough time devoted to the academic side, and contacts between the Inspectors and teachers were casual. It was also stated that the number of schools entrusted to the care of an Inspector was too large and the range too wide for him to be able to acquaint himself with their work and appreciate their problems ; nor was he in a position to advise and guide the teaching staff in improving the work of the school. It occasionally happened that the Inspector instead of being "the friend, philosopher and guide" of the school behaved in such a critical and unsympathetic way that his visit was looked upon with some degree of apprehension, if not of

resentment. In our view the true role of an Inspector—for whom we would prefer the term Educational Adviser—is to study the problems of each school, to take a comprehensive view of all its functions and to help the teachers to carry out his advice and recommendations. We also recommend that for special subjects like Physical Education, Domestic Science, Art, Music, etc., there should be attached to the Director's Office certain experts in these subjects who will inspect the different schools periodically and help in improving the standards of teaching.

Selection of Inspectorate

At present the Inspectorate is made up in diverse ways by different States. In some cases Inspectors are recruited directly to inspectional posts and while certain academic qualifications are prescribed, experience and other relevant qualifications are not duly emphasised. Once a person has been chosen for the Inspectorate he often continues in that line till the age of retirement. We are of the view that a person, to be chosen as an Inspector, should possess high academic qualifications (an Honours or Master's degree) and should have had teaching experience in schools for at least ten years, or should have been a Headmaster of a High School for a minimum period of three years. In addition to direct recruitment the Inspectors should also be drawn form :—

(i) Teachers of ten years experience.

(ii) Experienced Headmasters of High Schools, and

(iii) Qualified staff of Training Colleges.

We recommend further that suitable persons from any of these categories may be appointed as Inspectors for a period of three to five years after which they may revert to their original posts. In the initial stages, we suggest that fifty percent of such posts may be reserved for recruitment on this basis. It is necessary that Professors of Training Colleges should be conversant with the work done in the schools ; and that Headmasters should likewise have a chance to serve as Inspecting Officers for short periods. This will enable them to appreciate the position of the Inspector and to approach the problems of the schools with greater appreciation of the realities from their own experience.

Duties of Inspectors

The duties of an Inspector are divisible into administrative and academic. The administrative duties relate to the annual inspection of records, accounts, office routine, etc. For this purpose he must have the assistance of a competent staff. With the increase in the number and types of schools, this duty will require a considerable amount of his time if he is to discharge these functions properly and efficiently. The time needed for the purpose has necessarily restricted the scope of his activities on the academic side. Moreover, the multiplicity of the subjects taught

in the school by specially qualified staff now makes it very dfficult for any single officer, however qualified, to inspect them thoroughly and to advise on all their problems. We, therefore, recommend that the academic work of the school should be thoroughly inspected be a panel of experts with the Inspector as Chairman and this should be done once in three years. We recommend that three persons may be chosen from senior teachers of headmasters to visit schools in the company of the Inspector and to spend two or three days with the staff, discussing with them all aspects of school life—the library and laboratory facilities, the curriculum, the organization of extra-curricular activities, the use of the holidays and all other problems connected with school activities. Through these full and frank discussions, the inspectors will be in a far better position to help in the improvement of the schools. What is suggested is nothing new— colleges affiliated to Universities are visited by commissions of experts who inspect their working, discuss their problems and report to the University.

III

MANAGEMENTS AND CONDITIONS OF RECOGNITION

Types of Managements

During our tour we realised that there were several types of school managements. Among these may be mentioned :

(1) *Schools Managed by the States or the Centre* : These schools are comparatively few in number in the different States. They were at one time intended to be model schools whose general methods of work and organization might be adopted by those who wished to start schools. We cannot say that at present many of the State schools serve as models. In many respects, in view of the great demand for admission to schools, great laxity in the conditions which were observed previously was noted.

(2) *Other Types of Managements* : The large increase in the number of students anxious to join schools has led to a rapid increase in the number of schools and these have been started by a variety of managements, many of whom were not conversant with the needs of the school or the methods of their management. There are various types of schools managed by :

(*a*) Local bodies such as District Boards or Municipalities ;

(*b*) Religious organisations and other denominational bodies ;

(*c*) Resistered Trust Boards ;

(*d*) Certain private bodies ;

(*e*) Individuals.

(*a*) *Schools Maintained by Local Boards*: There are many schools which are maintained by local bodies and, though we do not wish to make any unfair generalisation about their efficiency. We have had enough evidence to show that there is considerable need for a toning-up of these institutions. As in the case of private managements, the Local Boards should have a small executive body for the management of schools. This executive body should not exceed 9 members with either District Educational Officer or some nominee of the Directorate as an *ex-officio* member of the Board. In the case of Municipalities or Panchayats, which have only one school in their charge, the headmaster should be *ex-officio* member of the Executive Committee. We feel strongly that the Board should not interfere with the internal management of the schools concerned, or with the powers and duties of the headmasters. We regret to note that, in many cases, members of local bodies have not hesitated to assume a responsibility to visit schools, to examine the records and sometimes actually to interfere with the teaching. We think this tendency on the part of individual members of the Local Boards to act as an inspecting agency should be strongly discouraged, and no member should have the right to inspect the school or to call for any statement or documents or in any other way to interfere with its internal management. The President of the Committee alone may be authorized to call for returns or information from the headmaster. Defects or complaints should be brought to the notice of the District Educational Officer who may be asked to report on them. It is important to safeguard the status of the headmaster and the teachers, if they are to function efficiently and exert their influence for good over the pupils. This does not, obviously imply that any serious lapse on the part of the teachers should be condoned. What we suggest is that the proper channel for enquiry into all such complaints should be the Headmaster and the District Educational Officer and not the members of the Boards, either collectively or individually.

(*b*) *Religious Organisations*: A number of religious organisations also conduct schools in the different States. These organizations have contributed to expansion of educational facilities and many of them have, on the whole, maintained a reasonable level of efficieney in their schools. Some of them, however, suffer from the various defects pointed out elsewhere such as over crowding and ill-qualified staff. In some cases the recruitment of staff is influenced by religious or sectarian considerations. These trends are also noticeable in schools run by other educational associations. Institutions run by communal organizations are also spread over different parts of the country and some of them are run on lines which have tended to promote unhealthy trends. The manner in which teachers are selected and in some cases the spirit in which the school is administered are not calculated to promote a broad and healthy national outlook.

(*c*) *Registered Trust Boards* : There are certain registered Trust Boards maintaining schools. It is laid down in some instances, under the terms of the trust deed, that the schools should be run exclusively for certain purposes or for certain sections of the population exclusively. This is contrary to the growing trend of opinion that all educational institutions should be open to children of every religion and community. The managements, however, are prepared to open their schools to all, but they are prevented from doing so by the terms of the trust. We recommend that legislation should be passed in such cases to permit the admission of all children to such schools but till that is done, they should be eligible to receive grant-in-aid like other schools.

(*d*) *Private Managements* : A large number of private bodies are at present managing schools. We are of opinion that all such bodies should be registered and should function as registered associations.

(*e*) *Individual Managements* : There is also a fairly large number of schools which are run as "proprietory schools" by individuals. We feel that no secondary schools should be run on such lines but that they should be governed by a suitable managing board registered under the Companies Act.

Control over the Opening of Schools

In recent years, the great increase in the number of schools has led to a great laxity in the conditions laid down for starting new schools. Our attention has been drawn to a large number of 'unrecognised schools' in some States and schools run by private individuals without prior consulation or approval of the education authorities concerned. This laxity has unfortunately led to a state of affairs where schools are run more like commercial enterprises than as educational institutions. We have also been given to understand that, in many cases, private individuals or groups of individuals start schools without proper buildings or equipment and, having enrolled a number of students, create a situation where the Department has no alternative but to recognize them for the sake of the students, though normally such schools should never have been allowed to function. Such educational institutions often spring up largely because of the paucity of recognised schools to cater the needs of an ever increasing school-going population.

From what has been stated above, it will be obvious that if schools are to be run on proper lines, if educational interests are to be duly stressed and a healthy spirit of citizenship is to be inculcated in the pupils, care should be taken that recognition is given only on clearly defined conditions which will ensure their proper running and the maintenance of the right atmosphere in them. In certain States, representations were made by teachers of privately managed institutions requesting that all schools should be taken over by the State. We are

not ourselves in agreement with this view and cannot, therefore, recommend such a course of action. On the other hand, we feel that private managements have got an important part to play in the scheme of education and that if a number of managements conduct schools in a spirit of emulation calculated to secure greater efficiency and co-ordination they will be better served. If such schools are run side by side with State schools, in an atmosphere of healthy competition, improvements in teaching and other aspects of education will be fostered. We have drawn attention to the many defects noticed in schools run by private managements, but we recognize that some of them have been doing their work very efficiently and should be given every encouragement. It is equally imperative, however, that managements which have failed to reach reasonable level of efficiency or have shown gross irregularities or in difference to educational interest should be given a clear directive to remedy these defects within a definite period. Attention of the State Governments may be invited to the British Education Act of 1944 which empowers the Ministry of Education to take over such schools which fail to conform to conditions prescribed, and run them as State schools for a time and eventually hand them back to the management concerned if it is found to be in a position to take over charge. We recommend that wherever possible, the States should similarly take over such schools. If this is not possible, it should not hesitate to close down such schools and make alternative arrangements for the education of the pupils of those institutions.

Conditions for Recognition of Schools

In many States there are definite conditions regulating the procedure to be adopted for recognition of schools. We believe that managements are complying with these conditions in such States. We, however, feel it necessary to suggest certain general standards and conditions of recognition which may be adopted with suitable modifications by all States for the purpose.

(1) Individual or proprietary managements should be definitely discouraged. All the Managing Bodies should be registered and should consist of a limited number of persons. We recommend that the membership of such managing bodies should not exceed fifteen.

In all such managing bodies, the headmaster should be an *ex-officio* member. In the case of schools which are to be started in future as well as in case of schools where managements have not already complied with the conditions of recognition, we recommend that a nominee of the Director of Education should be made a member of the managing body. His functions would largely be advisory, and we hope that his presence will help the managing body to understand the conditions to be satisfied for recognition and the measures to be taken for improving its

efficiency and its activities. We understand that this procedure has been adopted in the case of colleges affiliated to certain Universities and it has been found to work satisfactorily.

(2) No member of the Managing Board should directly or indirectly interfere in the internal administration of the school, the discipline of the students or the duties of teachers.

(3) Where a large educational society is responsible for the starting of the school, the actual management should be delegated to a small board functioning on the lines stated above.

(4) The managing body should be responsible for the passing of the budget for proposals to start new branches of study, for correspondence with the Directorate of Education in all matters pertaining to the managements of the school and for the appointment of the teaching staff under definite conditions of service. Every management should draw up definite rules of service wherein the conditions of salary, leave, etc., are definitely laid down and every teacher on his appointment should receive a copy of these conditions and execute an agreement for service in the school.

(5) Every management should be required to provide an endowment for the proper running of the school, the amount of the endowment being determined with reference to the number of diversified courses that the school may undertake and the general requirements of efficiency. The finances of the school should be kept separate from those of any other institutions under the same management and the interest or income accruing from the endowment should be shown in the receipts for the year. Full and proper accounts should be maintained, and the acquittance roll should clearly show each teacher's scale of pay and the amount drawn each month by him. Separate accounts should be kept for any special fees levied by the school. These accounts may be kept by the headmaster and scrutinised by an Accountant or Auditor of the school. These accounts should be prepared annually and should be subject to audit by the Department of Education. In regard to special endowments, gifts, etc., made to the school, a separate register of accounts should be mentioned which should also be duly audited, the income accruing therefrom being added to the general endowment fund of the schools.

(6) Every management should satisfy the Directorate of Education that adequate accommodation is available for the running of the school in a satisfactory manner. There should be adequate playgrounds and where possible rest rooms and cafeteria, or tiffin rooms where the pupils may have their mid-day meals.

Where the school admits girl students, whether in mixed schools or co-educational institutions, separate provisions should be made for retiring rooms and common rooms. We have already recommended that

a certain number of women should be on the staff of such schools, and provision should be made as far as possible for their accommodation near the school premises.

(7) The management should satisfy the Directorate of Education that qualified staff is available and will be appointed in accordance with the rules laid down by the Department for affiliations. The conditions of service should be uniform for the whole State, and there should be no difference between teachers in State schools and those in privately managed schools so far as the minimum scale of salary, conditions, security of service and the minimum amenities recommended are concerned.

(8) The number of pupils admitted per class and the total number that should be admitted for the whole school should confirm to the instructions of the Department, taking into consideration the material facilities and the staff available, as well as the number of subjects for which the school seeks affiliation. We have already stated that ordinarily we consider 500 as the optimum, 750 as the maximum, except in the case of schools with diversified courses of instruction, where the maximum may go upto 1,000 provided that not more than 40 pupils are admitted in any section.

We have noticed that at present there is no limit to the number of divisions that can be opened in each class. Some managements have opened a very large number of sections in their congested premises, thus increasing greatly the total number of students as well as the number of sections which each teacher has to teach. We do not think that this kind of education can possibly be efficient. We, therefore, recommend that the number of sections in each class should be limited, and before any increase in the number of sections is made, the prior approval of the Department of Education should be obtained. The Department of Education should take note of all factors and limit the numbers of sections in such a manner that teaching does not reduce itself to a mere mechanical process of repeating the same lesson over and over again in the course of a week.

(9) There is a wide divergence in the scale of fees charged by different managements. While we realize that no uniform scale of fees can be fixed for all institutions, we feel that the scales of fees fixed by managements should be subject to approval by the Department of Education. We recognize that in some schools, in view of the amenities provided and the appointment of better trained staff, it is necessary to charge a higher rate of fees. At the same time, we are anxious that managements should not indiscriminately raise the scale of fees. They should in any case be able to satisfy the Department that the higher fees charged are being actually utilised in the interests of the pupils. At the

other extreme, cases have been brought to our notice where neighbouring schools have been entered into unfair competition by lowering the scale of fees and by offering concessions and scholarships merely to attract students. We recommend that in the interest of general efficiency of schools, rules should be framed preventing such undue competition amongst neighbouring schools.

We have noted that a large number of "other fees" are levied by school managements for various purposes, and that the total amount of such fees, in some cases, comes to nearly half the tuition fee charged. We consider that this is too heavy a burden on many pupils which can certainly be lessened by carefully defining the activities for which such additional fee can be levied. It is desirable that some sort of uniform practice should be followed in this matter in each State. We suggest that the question should be looked into by a Committee appointed by the Education Department. It should not be open to any management to add arbitrarily to the special fees charged for such activities. It should also be ensured that such fees are spent for the objects for which they are collected. In this connection we have been informed that in one of the States it has been laid down that such fees should be charged once in the year and should not exceed the amount of the tuition fee for a month and the items for which they are to be expended are also specified.

In some institutions, subscriptions or donations are asked for the building fund, sinking fund, etc., on a supposedly voluntary basis. This may lead to abuse and should be discouraged.

(10) We have referred to the fact that a large number of schools is managed by certain denominational agencies or by certain sections or communities. In some of these institutions it has been noticed that recruitment of the teaching staff is confined to the particular caste, creed or section concerned. In our opinion this is not a desirable practice. Whatever may be the composition of the Managing Board, we are definitely of the opinion that, so far as the school teaching staff is concerned, it is the duty of the management to see that no such restrictions are imposed on their selection in the large interests of the school.

In view of the importance and urgency of providing for diversified courses of instruction, we strongly recommend that in the existing as well as the new schools when diversified courses of study are to be started, liberal financial aid and encouragement should be given. We realise that this would involve a considerable additional financial burden and we feel that this responsibility may well be shared by the State and Central Government. In all such cases, particularly when Technical and Agricultural courses are started, we recommend that the State and Central Government should contribute towards necessary equipment. It would then be the responsibility of the managements to carry on their

work, with such grant as the State may be able to give towards meeting their deficit. If this recommendation is not implemented there will be little chance of diversified courses being introduced in the near future.

We have described the conditions which should be fulfilled by educational institutions and reiterate that managements should be required to obtain prior approval of the Director of Education before opening a school which should not be given unless the minimum conditions prescribed have been fulfilled. It is advisable that a survey be made in each State of the existing educational facilities and a definite plan be formulated for the opening and location of new schools to meet the growing needs of population.

IV

SCHOOL BUILDING AND EQUIPMENT

Open-Air Schools

There has been some criticism regarding the construction of school buildings and the type of designs approved for this purpose. Examples have been quoted of schools in open spaces under the shade of trees, with very few permanent buildings constructed for the school. It has been suggested that in a country like India, open-air school should be encouraged and the heavy cost of construction of school buildings avoided, at least for the present. We visited some of these open-air schools and we felt that under certain conditions some of the activities of the school may be carried on in the open-air during part of the year.

Open-air schools serve a different purpose in other country. Such schools, under the prevalent climatic conditions, cannot possibly be a substitute for properly constructed buildings, but in the cases of certain types of handicapped children, open-air schools are necessary and are encouraged. For children affected with tuberculosis and other diseases which require plenty of fresh air, open air schools are encouraged. In such schools, however, admission is limited to children suffering from the particular disease.

Two factors may, however, be noted : (1) The open-air system lends itself to small groups of students being taught there, and it also requires good shade and a large area for carrying on instruction satisfactorily ; (2) while much theoretical instruction in certain subjects may be given in open-air classes it is impossible to certain other subjects unless suitable accommodation is provided for them. Thus the laboratories, libraries and workshops should be located in buildings suitably constructed. In any case the school requires considerable grounds for the physical education programme to be carried out, for group games and certain of the extra-curricular activities of the school. We have also

referred to the need for agricultural farms in schools where agriculture is taught as a practical subject. Such farms may belong to the school or they may be taken on lease from neighbouring farmers who may rent them for a consideration.

Whatever be the type of school building that is ultimately approved certain important requirements should be fulfilled : (i) sites for buildings and play grounds ; (ii) extent of site required ; (iii) type design of school buildings ; (iv) easy means of transport or easy accessibility.

Sites for Buildings and Playgrounds

Selection of a site will depend on whether the school is to be situated in a rural or urban area.

Rural Schools : These schools should be established in village with a fair amount of population and easily accessible to the surrounding villages. There should also be enough open-ground available for playgrounds and extra-curricular activities of the school. If a residential school is thought of in the rural area, care must be taken to see that sufficient ground is available for the residence of staff and pupils and for out-door games. We have referred to the fact that the school should be a centre for the intellectual, social and physical activities of the community of the neighbourhood, and therefore, it is desirable to see that easy accessibility is secured and that the open area available is also adequate.

Urban Schools : Here a site for a school may present many difficulties. We believe that by encouraging rural schools, the pressure on urban schools will diminish, more particularly if residential rural schools are encouraged by the State. The site for an urban school should not be in very congested area or in industrial areas. As far as possible the school should be so located that while facilities for transport of students are available, the school itself should be in an area free from the noise and bustle of city life. Many schools nowadays make their own transport arrangements for the students and this should be encouraged. As in the railways the public transport should be made available to school-going children at a concession rate. In big cities the possibility of locating some of the schools in one area with sufficient playground and open space should be explored with the necessary arrangements for transport.

Playgrounds

Playgrounds and open spaces for students' recreation are essential. It may not always be easy to secure enough playground and open spaces in a crowded city, but such open spaces as are available must be conserved to be utilised by groups of schools, if necessary. It is desirable that in all cities, more particularly in big cities, a Committee representative of the school managements, headmasters, city authorities and others interested in the physical welfare of the students together with repre-

sentatives of the State should be organized to promote "Play-centre Movement" and from time to time to see that the playgrounds available in the city are effectively used by the school-going population.

Legislation for Acquiring Open Spaces

In this connection we wish to stress the importance of keeping playgrounds and open spaces in the big cities free from encroachments either for industrial purposes or for business concerns or for building programmes. We regret to note that in several cities it has become a regular feature for building programmes to encroach upon these open spaces not realising the necessity of keeping such open spaces free and of utilizing them for the health and welfare of the youth of the country. In this connection, attention is invited to the Open Spaces Act of 1906 as amended in 1912 to cover open spaces and recreation grounds enacted in the United Kingdom. Under this Act, any park, open space or playing field cannot be encroached upon by any of the local authorities without the matter being placed before the Parliament and a specific sanction being obtained. Consequent upon this wise measure, we find that the open spaces in the large cities in England are still kept as open spaces and in spite of a very heavy building programme, none of these open spaces has been encroached upon. We recommend therefore that the State and Central Governments should immediately take steps to see that a survey of open spaces, parks and playing fields in all cities, municipalities and in the bigger villages is made and that a complete record of this is maintained and necessary legislation passed to prevent such encroachment for industrial and commercial purposes or for housing societies without proper sanction by the Government. If the youth of the country are to be properly encouraged in physical education and their health improved, we believe that this is one of the urgent steps that should be taken and we therefore recommend early legislation towards this end. Where there are open spaces belonging to the State or the Centre in any part of the country, rural or urban, the first consideration that should be borne in mind when any scheme is entertained for the utilisation of such sites is the need for preserving them as open spaces, parks or playgrounds for the community as lungs for the city or the rural area concerned. It is only when these conditions are fully satisfied that the assignment of such open spaces as are under the control of the Government for other purposes should be considered. We feel that unless a legislative measure of the kind stated above is passed urgently, open spaces now available for use as play-fields and recreational grounds for the children and the youth of the country would soon be denied to them. We recommend also that wherever such open spaces are available steps should be taken by the State in consultation with the local authorities or the rural community to convert them into suitable playing fields and place them at the disposal of the schools and of the public of the area concerned.

Type and Design of Schools

There are at present rules and regulations prescribing the conditions under which schools be constructed. Provision is made in such schools to see that there is a free circulation of air, proper light, shelter from monsoonish weather, and it is also laid down that the rooms constructed should have a certain minimum area to accommodate a certain number of school children in a class. Attention in this connection is invited to the Report of the School Buildings Committee appointed by the Central Advisory Board of Education in 1941. The Report which is comprehensive has made valuable suggestions regarding the school buildings and their equipment. We believe that every classroom should provide for an area of not less than 10 sq. ft. per student.

We are also of opinion that the number of students in any class should be limited so that classrooms are constructed to accommodate this number. In some States the number is limited to 30, in others to 40. but we have noted with regret that in recent years, these numbers have been exceeded : in some cases 50 to 60 pupils are admitted into a class. We feel strongly that at this age period, with a view to establishing personal contact between the teacher and the taught and to exert a wholesome influence on the pupil, the optimum number that should be admitted to any class should be 30 and the maximum should not exceed 40, We recommend that in future, schools should be so constructed that they can develop later into the pattern of multi-purpose schools affording facilities for more than one type of diversified courses. It is very likely that in the majority of schools. owing to limitations of finance and personnel, more than one or other of the diversified forms of instruction may not be possible. But ultimately it is our hope that many schools may be able to afford facilities for two or more diversified courses. Any type design must therefore take note of this possibilities of expansion as well as of the variety of courses that may be provided. We feel for instance that it should be necessary to provide for workshops, for certain laboratories, certain special rooms for drawing, painting or music, etc, and it is desirable that any design for a school building should take these into consideration and so adjust the design that in course of time without much change of the original building, such additional accommodation may be provided. Even if diversified courses are not provided, it is absolutely necessary to maintain at least a small workshop with the necessary equipment.

We are of opinion that the present trend in certain schools to multiply the number of sections in each class and to increase the total strengh in the school should not be encouraged. We regret to say that we have come across schools where the total number of pupils has exceeded 2,000, each being divided into 8 to 10 sections. This excessive number has led to a great deal of laxity not only in the

teaching, observation and recording of the work of the individual student, but in the maintenance of discipline and in the relationship that should exist between the teacher and the taught. In certain cases pressure has been brought to bear on the headmasters of schools by managements, by parents' associations and by public bodies and sometimes by the authorities concerned, to admit a much large number of students and even to adopt the double shift system to increase the number of school-going population. The schools under such circumstances have to work like factories and the bad effect upon the education imparted to children of such schools can hardly be exaggerated.

Construction of Schools

The schools must provide for (1) certain amenities for the students such as common room, sanitary convenience, provision for mid-day meals and refreshments to be taken, and in the case of girl students retiring rooms with necessary conveniences separately ; (2) accommodation for teachers with a common room available for them ; (3) a reading room and a library ; (4) a visitors room where parents or relations who wish to interview the headmaster may wait ; (5) a room for the Headmaster and an office room and a room for the Assistant Heamaster, should such a person be appointed : (6) laboratories and workshops where necessary, such laboratories and workshops being constructed on an approved plan and for a definite number of students.

With reference to the library and the reading room, we have stated elsewhere that the school must be a centre of the intellectual activity of the whole community particularly in rural area, and for this purpose the library and reading room should be so constructed that, out of school hours, it may be possible for the general public also to use the library under certain prescribed conditions. This is one of the ways in which a school can "go to the community" and educate as well as interest the community in its welfare. We also recommend that wherever and whenever it is possible, without interfering with the regular programme of school work, the school premises may be placed at the disposal of the public of the place for any of the general purposes for which there is necessity. The idea prevalent hitherto that a school building should be utilised only for school purposes should no longer be entertained in view of the larger role the school should play in the general interest of the local community. This will secure a better appreciation of the role of the school and a better education of the school-going population themselves in methods of social service and in various spheres of activity calculated to benefit the community around. We feel that the more the school benefits the community at large, the more the community itself will assist the school, and many healthy activities can be conducted with the full co-operation of the public of the locality. It should, however,

be clearly understood that the Headmaster is the final authority to decide what activities may be allowed in the school premises.

There is one other aspect of the design of the school that we have to refer to. In some parts of the country, owing to climate conditions, it will be necessary to have indoor accommodation for physical education. The boys could then take active part in physical exercises in open halls where facilities for recreation can be provided.

Research in Building

One other point which we wish to stress is that both in the type design of schools as well as in the type design of furniture etc. there is considerable scope for research to make them suit Indian conditions. This research has not so far been undertaken and we think it could be carried out at the Central Building Research Institute with the Joint efforts of the teacher and the architect or engineer concerned. The furniture should suit the age group, height, etc., so as to develop proper sitting postures, etc.

Equipment

The equipment of a school is a matter which requires great care. We regret to say that we have noticed many schools where there was hardly equipment, and subjects were taught under conditions where boys were forced to memorise rather than understand what was taught. In some of the schools we visited, it was quite clear that the laboratories were hardly ever used, except as store houses for odds and ends ; theoretical instruction in such important subjects as Physics and Chemistry was given in the class-room. It is obvious that to teach Geography without a proper supply of maps, elementary physics without models and instruments, elementary chemistry without the rudiments of a laboratory would be giving a theoretical instruction without utilising the many valuable aids, but this is what is exactly happening in certain of the schools.

We understand that in some Universities, definite rules have been framed in this behalf and list of essential equipment needed for each subject and for a certain number of students to be taught in such subjects have been drawn up. It is a condition of affiliation that the minimum equipment as set down should be made available before affiliation can be granted to the college. We recommend that in the case of schools also for every subject which requires practical instruction in one form or another and for such subjects where audio-visual aids are essential, directions should be given with regard to the equipment that ought to be made available and the exercises that ought to be provided so as to make the teaching of the subject more instructive and useful to the pupils concerned. We feel this would be all the more necessary. In the diversified courses of study, which we are recommending, and unless such a scheme is adopted we are afraid that school may

get affiliated for such diversified courses of instruction, without having the necessary equipment and appliances and the theoretical type of instruction will seriously impair the value of such courses. We recommend, therefore, that Expert Committees should be appointed to lay down the equipment required for each of these diversified courses, including the workshop equipment and the number of pupils that can be conveniently accommodated in the workshop.

Audio-Visual Aids

There are some modern methods of Audio-Visual education used at present in different countries which have yet to be more fully utilised in our schools, and we feel that suitable provision must be made for this purpose. Among such equipment may be mentioned film and film-strip projectors, radios, magic lanterns and Epidioscopes, etc. Such appliances may be shared by two or three schools to be used by them in rotation at different times of the day or on different days. We have referred elsewhere to the part that the radio can play in giving general education to the students of school and colleges, and the close liaison that should be maintained between the teaching staff of the school and those connected with All-India Radio. We were very glad to know that in many States such a close liaison is maintained and the headmasters of the schools and other teachers were consulted as to the type of broadcasts that would be of interest and benefit to the school-going population.

Hostels for Residential and Residential Day-Schools

We have recommended both residential schools and residential day-schools. Residential schools should provide for accommodation not merely for the pupils but also for playgrounds for the residential schools. In the design of residential schools, proper accommodation should be provided for library, for indoor games, dining halls, dormitories and separate accommodation for the care and isolation of the sick. The care of the sick in residential schools is a responsibility of the management and while efforts may be made to admit those who are seriouly sick in the neighbouring hospitals for minor ailments, arrangements for temporary isolation should be provided.

We have already referred to the fact that in the Day-Residential schools children would be expected to come in the morning and stay there till late in the evening and that through the cafeteria or otherwise, arrangements may be made to provide them with mid-day meals and refreshments at cheap rates. It is therefore necessary that there should be a dining room for the purpose and also certain common rooms where the pupils may take rest. In this connection we wish to stress the need for a cafeteria to be opened in all day schools. It is unfortunate that

the managements have not taken care that their school children should have, when necessary, clean food and filtered water to drink. We have noticed that several coffee hotels have a brisk trade just by the side of the school, where there is no guarantee of wholesome food or drinks being available. It should be the endeavour of the managements to see that such shops are not encouraged and that in the school itself a well run cafeteria providing clean and wholesome food at comparatively cheap rate is available. We recommend also that co-operative stores be established in all schools providing school requirements at almost the cost price. We feel sure that if the teachers take some interest there should be no difficulty in establishing such co-opereratiye stores. In some States co-operation has a strong-hold. The school design should naturally take note of the requirements of cafeteria and co-operative stores.

Quarters for the School Staff

It has not often been realised that for efficient service in the school, the teachers concerned should have suitable quarters as near the school as possible. This is particularly true of schools situated in urban areas. We feel that the presence of the headmaster and some at least of the staff in or near a school, particularly if there are hostels attached or where the schools are residential will be of the greatest benefit to the school-going population. It will attract teachers to the schools, and it will be of great benefit to the management itself if quarters can be assured. We consider that this is particularly necessary and not merely desirable, in the case of girls' schools for women teachers. We have had occasion to note that for lack of suitable quarters, there has been great difficulty in recruiting women teachers to some of the girls' schools. The community life of the teaching staff thus encouraged by the provision of quarters in the area would go a long way to promote their sustained interest in the school and their united effort for the better running of the institution. We recommend also that quarters should be provided for the teaching staff of boys' schools, particularly in rural areas where no quarters are available at present for the majority of the teachers. In urban areas. the cost of rented buildings is prohibitive, and teachers with small emoluments can hardly live in decent quarters. We therefore recommend that quarters be also provided as far as possible in the urban areas. In doing so, the State should come to the aid of the school by starting co-operative housing societies and by giving loans to the management of the schools on easy terms. If these recommendations are accepted and adopted, we feel sure that the whole atmosphere of the school will be different and that efficiency and discipline will improve and the community itself will begin to realise that the school is an institution calculated to serve the need not only of the pupils but of the whole community.

V

HOURS OF WORK AND VACATIONS

In most States the hours of work in schools are specified and a uniform practice is observed which does not take into consideration the varying needs of the locality, the climatic conditions therein, and the manner in which the school pupils may best serve their families. We feel considerable latitude should be given to schools to arrange their school hours in such a way that they do not interfere with the life of the community or with the general conditions prevailing therein. Provided the total number of working days and the number of working hours per day be fixed, it should be possible for schools, with the previous approval of the Director, to vary the hours of school work, with due reference to the changes in the season. Particular note may be taken of the requirements of rural schools and of the occupations of the community. Thus during the agricultural seasons when the parents have to depend on the help of their children, it is good for the children to be associated with such occupations of their parents, whatever may be their future vocation in life. Nor do we consider it desirable to have fixed hours common to all schools independently of seasonal variations.

We recommend that the total number of working days in a school should not be less than 200, that the working hours per week be at least 35 periods of 45 minutes each inclusive of time spent for some of the co-curricular activities of the school. The school should work regularly for 6 days in the week, one of the days being a half day when the teachers and the taught may devote special attention to the pursuit of extra-curricular activities. We have already stated that all teachers should take part in one or other of the extra-curricular activities and with this end in view we recommend that a teacher should not be given more than 30 periods a week.

Vacation and Holidays

No country, perhaps, enjoys as many holidays as India and with the innumerable holidays given for various religious functions, the work of the school is seriously handicapped. School work suffers much by interruption and it is far better to give short vacations during the academic year. We recommend that school holidays need not conform to holidays declared by the Government, that two months vacation should be given in summer, and that there should be two breaks of 10 to 15 days at suitable occasions in the year.

VI

RECRUITMENT TO PUBLIC SERVICES

Effect of the Present Method of Recruitment on Education

We have discussed at considerable length that Universities have had a dominating influence on secondary education which only aims at qualifying candidates for entrance to a University. But more than this, the present method of recruitment to public services in the country has a deadening influence on both secondary education and other grades of education. Complaints are common that the type of education prevalent for over a hundred years was mainly intended to provide clerks for Government service. Whatever may have been the motives in the past, it is obvious that at present and in the future the very large number of young men who seek educational opportunities can never hope to secure employment in Government service, because the number of posts is very limited, If education is to lead the individual to secure employment on the basis of his general accomplishment, it seems necessary that there should be a change not only in the nature of education but also in the policy and in the methods adopted for recruitment to public services.

Present Method of Selection to Services

At present the Public Service Commission holds a competitive test for selecting candidates for different grades of public services. The maximum age for recruitment to most of the services irrespective of the nature of the work is 25 years. In the case of persons belonging to some of the educationally backward communities there is a relaxation of the age period. It is surprising that the competitive tests for even the lowest grade of clerical posts is based upon this maximum age period and not on the stage of education completed. Both the products of school and of the University are allowed to sit for the some competitive test conducted by the Public Service Commission and it is not clear how the same type of questions can hold good for matriculates as well as graduates. It is also difficult to understand how by such a test the achievements of candidates of different grades of education can be evaluated. A boy is thus forced to pursue higher courses of study even up to the age of 25 in the vain hope that, somehow or other, at some period of his educational career he may be able to secure through a competitive test the coveted post of a lower division clerk. Economic wastage involved in this method of recruitment as well as the psychological wastage involved in the unnecessary pursuit of higher academic studies by the unsuitable candidates are obvious. The over crowding of educational institutions in the higher spheres of education is one of its consequences.

Recruitment in India

In India the usual practice is to recruit persons who are below 25 for all grades and classes of employment and later to leave it to them, in some manner or other, and without any guidance, to pass the special tests which are needed for promotion from one post to a higher post.

There is also another unfortunate trend which has come to force in recent years. Promotion to a higher post is based not on his work or the special tests passed by him but on his qualifying for a degree. This has resulted in a constant pressure upon Universities to permit employees in Government service to appear for University examinations after private study and obtain a higher qualification.

Methods of Recruitment in Other Countries

We have examined the methods of recruitment in other countries and the principles on which such recruitment is based. The policy in recruitment to the civil service in general and to the administrative posts in particular in the United Kingdom is based upon certain considerations such as :

(*i*) Recruitment at an early age.

(*ii*) A close linking of the various methods and stages of entrance with the educational system of the country.

(*iii*) The emphasis on a general rather than specific preparation for career as an officer.

(*iv*) An examination which does not seek unduly to influence the general school and University curriculum.

(*v*) Finally as a corollary to the former, the desire that candidates who have failed in the civil service tests should not be at a disadvantage in their study for other professions. A general education which enlarges and strengthens their understanding is what is required so that it will precede the special education which must qualify persons to discharge the business of their post.

Suggestions for Improving the Methods of Selection

We believe that to get the most suitable persons for the different grades, the practice that obtains in most of the Western countries should be followed. Selection should be made at various age periods 16 to 18 19 to 21 and 22 to 24. If the first recruitment is at the age periods of 16 to 18 and a competitive examination is held, the person so selected will have received sufficient education and be sufficiently mature for his work and for further training to discharge the particular duties thereof. It should be left to the department concerned to plan the method of further

training for the type of work that is expected. Such training should be given as part of the routine duties he has to perform. The next category will be those who have attained the age of about 19. That bulk of such candidates are like to have passed the higher secondary stage of examination and would know how to prepare for such a test. Likewise at the next higher age level, the test being of a more advanced nature, it will generally draw candidates who have either completed the University degree or who are appearing for it. This would also give scope for persons who have not the resources to go to colleges but may study privately to compete for selection to administrative posts. People who will be selected for the last grade, between the ages of 22 and 24, will be for highest services like the Indian Administrative or Foreign Service. ect. In practice most of them would have obtained a University degree but this should not be put down as a *sine qua non* for appearing for the competetive test.

It may be argued that the number of people who would appear for such a test may be so large that it may not be possible for the Public Service Commission to conduct these examinations. This is no doubt a difficulty but the method has certain definite advantages. The students will not pursue a purposeless education to obtain a degree which would only lead to the over-crowding of colleges by unsuitable candidates and to increase the number of unemployed graduates. Another advantage would be that those who have taken to highly specialised courses of instruction would not then be crowding into government posts for which such training is not needed. It has been rightly pointed out by many leaders of public opinion that the qualification prescribed for government service in the country have given undue importance to University degrees and this has led to a large number of unfit persons flocking to the Universities much to the detriment of standards and the tone of university education. The policy pursued by Government in this respect is followed by some employers also.

We therefore recommend that a careful study should be made of the conditions of recruitment and that a University degree should be prescribed only for such posts, largely professional—where high academic attainments are obviously necessary.

We recommend that the whole system of recruitment to public service should be examined *de novo* by a competent committee specially appointed to see how far the methods of recruitment can be improved and show they could be best applied to the different levels of education.

We also recommend that for a transitional period the methods of recruitment that we have suggested based on the age limit should be tried for about 50 per cent of posts, while the recruitment to the rest be made on the present basis. The results of these methods should be carefully watched before all the posts are treated on a uniform basis.

SUMMARY OF RECOMMENDATIONS

Organisation and Administration

1. The Director of Education should be the officer mainly responsible to advise the Minister and for this purpose, it is necessary that he should have at least the status of a Joint Secretary and should have direct access to the Minister.

2. A Committee should be constituted both at the Centre and in each State consisting of the ministers concerned with the various grades and type of education in order to discuss how best the resources of the department could be pooled for the furtherance of education of all types.

3. There should be Co-ordinating Committee consisting of the department heads concerned with the different spheres of education in order to consider methods of improvement and expansion in all fields of education.

4. There should be a Board of Secondary Education consisting of not more than 25 members with the Director of Education as its Chairman to deal with all matters of education at the secondary stage and to lay down general policies.

5. A Sub-Committee of the Board should deal with the conduct of examinations.

6. There should be a Teachers' Training Board for supervising and laying down the conditions necessary for the proper training of undergraduates and for suggesting, for the consideration of the Universities, improvements that may be needed in the training of graduates.

7. The existing Central Advisory Board of Education should continue to function as a co-ordinating agency to consider all-India problems concerning education and State Advisory Boards should be constituted on similar lines in each State to advise the Department of Education on all matters pertaining to education.

Inspection of Schools

8. The true role of an Inspector should be to study the problems of each school and view them comprehensively in the context of educational objectives, to formulate suggestions for improvement and to help the teachers to carry out his advice and recommendations.

9. Special Inspectors or panels of Inspectors should de appointed to inspect the teaching of special subjects like Domestic Science, Art, Music, etc.

10. Persons selected as Inspectors should possess high academic qualifications, adequate teaching experience or experience as Headmasters of High Schools for a maximum prescribed period. In addition to direct

recruitment, Inspectors should also be drawn from (i) teachers of ten years' experience, (ii) headmasters of High schools, and (iii) duly qualified staff of training colleges who may be allowed to work as such for a period of three to five years.

11. The Inspectors should have a competent staff to help them in the discharge of their administrative duties.

12. In order to evaluate the academic side of activities of a school there should be a panel of experts with the Inspector as Chairman to inspect the schools.

13. Three persons may be chosen from senior teachers or Headmasters to visit the school in the company of the Inspector and to spend two or three days with the staff, discussing with them and with the school authorities all aspects of school life and problems.

Managements and Conditions of Recognition of Schools

14. Recognition to schools should be given only on clearly defined conditions which will ensure their proper running and the maintenance of proper standards.

15. The Managing Boards of all schools should be registered and should consist of a limited number of persons with the headmaster as an *exofficio* member.

16. No member of the Managing Board should directly or indirectly interfere with the internal administration of the school.

17. Every management should be required to draw definite rules of service wherein the condition pertaining to salary, leave, etc., should be definitely laid down.

18. For proper running of a school every management should be required to provide endowment and the income accruing from this should be shown in the receipts of the year.

19. The scales of fees fixed by the managements of a school should be subject to approval by the Department of Education.

20. A committee should be appointed when necessary by the Department of Education to go into the question of levying uniform scale of tuition fees and other fees and all accounts of the school should be subject to audit by the Department.

21. The management should satisfy the Department that qualified staff is available and will be appointed in accordance with the rules laid down by the Department for affilition.

22. The management should satisfy the Department that adequate accommodation and equimpent etc, have been provided for the efficient running of the school.

23. The number of sections in each class should be limited and before any increase in the number of sections is made, the prior approval of the Departmen t should be obtained.

24. In the interest of the general efficiency of schools, rules should be framed preventing undue competition amongst neighbouring schools.

25. The teaching staff should not be limi ted to any particular caste or community but should, as far as possible, be recruited on a wide basis.

26. In view of the importance and urgency of providing diversified courses of instruction, financial aid and encouragement should be given to the existing schools as well as the new schools providing deversified courses of study.

27. Managements should obtain prior approval of the Directors of Education before opening schools and the approval should not be given unless the minimum conditions prescribed have been scrupulously fulfilled.

School Building and Equipment

28. Secondary schools should be established in rural areas in central places with sufficient population which are easily accessible to the surrounding villages.

29. Schools in urban areas should, as far as possible, be so located that they are free from the noise and congestion of the city and necessary transport facilities should be made available for students.

30. The open spaces available in cities must be conserved to be utilised as playground by groups of schools and the State and Central Governments should prevent, through legislation, encroachment on them for industrial or commercial purposes or by housing societies.

31. Normally, in designing buildings for schools, care should be taken to see that an area of not less than I0 sq. ft. is provided per student in the class-room.

32. The optimum number of boys to be admitted to any class should be 30 and the maximum should not in any case exceed 40 ; the optimum number in the whole school should be 500 while the maximum should not exceed 750.

33. The schools constructed in future should provide facilities for the introduction of diversified courses.

34. In the type design of schools as well as the furniture, etc research should be carried on to improve functional efficiency and to adjust them to Indian conditions.

35. Expert Committees should be appointed to lay down carefully the amount and the kind of equipment required for various types of diversified courses and workshops.

36. Cooperative stores should be established in all schools where books, stationery and other meterials required by students are made available to them at cost price.

37. So far as possible, quarters should be provided for teachers in rural areas as well as urban areas to attract suitable persons to the profession and to facilitate development of a corporate community life in the schools.

Hours of Work and Vocations

38. Considerable latitude should be given to schools to arrange their school hours in such a way as not to interfere with the activities of the community and the general climatic and occupational conditions prevailing in the locality.

39. As a rule the total number of working days in a school should not be less than two hundred, the working hours per week should be at least thirty-five periods of about forty-five minutes each ; the school should work regularly for six days in the week, one of the days being a half day when the teachers and students might meet informally and work together on various extra-curricular and social projects.

40. School holidays need not be identical with public holidays as declared by the government and normally during the year there should be a summer vacation of two months and two breaks of ten to fifteen days at suitable periods during the year.

Recruitment to Public Service

41. The selection for and recruitment to public service should be made successively at definite age periods *i.e.* the age 16 to 18, 19 to 21, 22 to 24.

42. For a transitional period, this method of recruitment on the basis of age groups should be tried for about 50% of the posts, while the other 50% should be recruited on the present basis and this proportion should be gradually reduced.

43. A careful study should be made of the present conditions of recruitment with particular reference to the relationship between the University degree and public services and such degree qualification should be prescribed only for posts that require such high academic attainments ; for this purpose, a Committee should be appointed to go into the whole system of recruitment of public service and to consider how far the methods of recruitment could be improved and related intelligently to the different levels of education.

CHAPTER XIV

FINANCE

Financial Aid to Secondary Education

The question has often been asked whether finances will be available to implement the recommendations that the Commission may make. It has been pointed out that the recommendations of the previous Commissions have not been given effect to largely because the necessary financial resources could not be made available either by the State or by the Centre. While some of the recommendations that we have made may possibly be implemented without undue strain on the financial resources of the State or the Centre, the most important of our recommendations do require substantial financial help if they are to be worked out successfully.

Responsibilities of Centre and States

We have been told that under the Constitution, secondary education is a responsibility of the States. We have already expressed the view that the Centre is not absolved of all responsibility in regard to secondary education, particularly those aspects which have a bearing on the general economic development of the country and the training for citizenship. Moreover the fundamental rights guarantee to every citizen free and compulsory education up to the age of 15 this implies that responsibility in this behalf is shared both by the States as well as the Centre. It seems obvious, therefore, that in all matters connected with the improvement of secondary education there should be fullest co-operation between the States and the Centre both in regard to the lines on which education should develop as well as the manner in which the recommendations should be implemented.

In this respect we wish to draw attention to the analogy of the United States where, although education is the responsibility of individual States which can carry out their own experiments in education independently, there is an over-all pattern of education for all American youths, which has the approval and support of the Federal Government— The Federal Government has found it necessary to guarantee through legislation substantial financial aid for educational development. The recommendations to which we attach great importance relate to the implementation of vocational education as a part of secondary education and its expansion to all parts of the country as early as possible and the improvement of the status and conditions of service of the teachers. No

progress in secondary education is possible unless the teaching profession attracts the right type of people and proper conditions of service, including salary, are guaranteed at the different levels of education.

Sources of Revenue

At present, the sources of revenue for educational purposes at the *State* level are: (1) State Government grants; (2) Grants made by Municipal and other local bodies directly or through an educational cess; (3) Private benefactions and grants made by private managements; and (4) School fees.

An educational cess can be imposed by local bodies under permissive power given to them by State Governments. It is levied on land revenue, or as part of the profession tax or on property tax in urban areas. The rate of cess varies and although the local bodies can levy the maximum educational cess permissible under the Act in many cases this has not been done.

State Grants

The grants given for education vary from State to State. Educational institutions under private managements are given grant-in-aid to assist them in the expansion and improvement of their educational facilities. These grants given may be for any of the following purposes :—

(1) Payment of stipends to teachers under training;

(2) Payment of medical officers for medical inspection;

(3) Maintenance in boarding homes of orphans;

(4) Construction and extension of school buildings and hostels;

(5) Furniture, apparatus, chemicals and books for library;

(6) For acquisition of lands for school buildings, hostels or playgrounds;

(7) For crafts or industrial education;

(8) Maintenance grant.

But grants for all these purposes are not given by all States, and the grant-in-aid code would seem to need revision in the light of the new proposals for educational reform.

Vocational Education in U. S. A.

The way in which vocational education has been implemented in the United States of America and the reasons which led to its rapid development in that country deserve notice.

In the United States schools are controlled entirely and supported to a very large degree by the different States. However, the Federal Government has had considerable influence in educational matters and, in recent years, it has increased its grant-in-aid to the States for part

of their educational progress. In 1862, an Act called the Morall Act was passed which made natable change in the educational policy pursued by the Federal Government. It was laid down that the principal objective of such aid would be, without excluding either scientific and classical students, to teach branches of learning as are related to agriculture and the mechanical arts in such a manner as the legislatures of the State may prescribe, in order to afford the industrial classes a liberal and practical education in their various pursuits. This policy has been steadily kept in view. A further impetus to vocational education was given by the passing of the National Vocational Education Act of 1915 commonly called the Smith-Hughes Act (Appendix X). This Act is intended to provide for the promotion of vocational education, for co-operation with the States in the promotion of education, agriculture, trades and industries and in the preparation of teachers of vocational subjects and to appropriate money and regulate its expenditure. The detailed provisions of the Act deal with grants to assist the States in paying the salaries of teachers, supervisors and directors of agricultural subjects and teachers of trade, industrial and home economics subjects.

To enable the objectives to be attained, a Federal Board of Vocational Education was created consisting of the Secretaries of Agriculture Commerce and Labour, the U. S. Commissioner of Education and three citizens of the United States to be appointed by the President with the advice and consent of the Senate. The Board was given the power to co-operate with the State Boards in carrying out the provisions of this Act, and it was the duty of the Federal Board to make or cause to have made, State investigations and reports dealing with the establishment of vocational schools and classes and the giving of instruction in Agriculture, Trades and Industries, Commerce and Home Economics. The funds made available to the Federal Board of vocational education could also be utilised for printing and binding of books of reference and periodicals. A series of supplementary acts for the same purposes followed, the most significant being the George Barden Act of 1946, which authorised an additional sum of 28,500,000 dollars to be distributed to the States for vocational education. In order to receive the federal funds mentioned in the Smith-Hughes Act, the various States and territories were required to match from States, territorial or local funds or both, 100% of the federal money *i.e.* grants were made on a dollar to dollar basis paid by the Federal and State Government respectively. It was, however, found that the States and territories actually exceeded their share of the contribution.

As a result of the Smith-Hughes Act and later the George Barden Act, vocational education received a stimulus which has resulted in a very large increase of trained personnel and much greater industrial prosperity in the United States. We understand that similar Acts have been passed in some other countries also, notably in Canada.

We have referred to this Act in some detail, because, if our country is to make any progress in vocational education and help agriculture, industry, trade and commerce, it can only be done by passing an Act of Legislature of similar nature, guaranteeing Central funds for the different States for the organization and promotion of vocational education. At the Centre, different Departments under serveral Ministries are now expending considerable sums of money for special educational purposes. So far as secondary education is concerned, the Centre has not given any substantial aid except to those institutions for those maintenance it has a direct responsibility. We, therefore, recommend that a suitable Act on somewhat similar basis should be passed which will enable the different Ministeries concerned to pool their resources in the field of secondary education and to establish a central organizatian to supervise the development of vocational education in the different States. It should be able to assist in their proper organization, equipment and maintenance and in providing properly trained teaching personnel who may be paid adequate salaries. As in the Acts quoted above, the matching of such Central grants with grants from State funds should be laid down as a condition.

The Federal Board for Vocational Education

We recommended that a Board should be constituted at the Centre to be called the Federal Board of Vocational Education. The funds for this board should be contributed by the different Ministeries, more particularly the Ministries of education, Railways and Communication, Food and Agriculture, Industries, Trade and Commerce. The Board should consist of representatives of the different Ministeries mentioned above, together with representatives of the Ministeries of Finance and Defence. To represent the general public, the Presidnt of the Republic may nominate three distinguished persons to it. The Chairman of the Board should be the Minister of Education at the Centre and the Secretary of the Ministry of Education shall be its Secretary. The Board should have power to co-operate with the State Boards in carrying out the provisions of the Act and it should have generally the same functions as the United States Federal Board. The funds at the disposal of the Federal Board shall be distributed to the State concerned taking into consideration the percentage contribution of each State which should be fixed at a definite percentage of the whole grant or with reference to the particular purpose for which the grant is given and the size of the school-going population of each State. These provisions may be incorporated in the Act to guide the Board in its work.

Our Possible Sources of Finance

(*i*) *Technical Education Cess*: We have mentioned in an earlier chapter that the spread of technical education would directly benefit industry, trade, commerce, transport, etc, and therefore, it is reasonable

to expect that industry to contribute towards the training of well qualified technical personnal. The evidence tendered made us feel that industry would welcome this cess if it is taken into full confidence and given a voice in shaping the policy of technical and industrial education. At present, a special cess is levied on certain industries to promote development and research in them. While this is of greater value, it cannot be denied that the employment of well-trained qualified technicians in *all* grades of industry will result in much greater improvement, and this would depend largely on the reorientation of the secondary education as envisaged by us. Among the industries that will largely benefit from employment of such trained personnel, there are the textile industry, steel, ship building, motor cars, railways and transport, mining, machine tools and other engineering industries etc. We, therefore, recommend that a cess called the Industrial Education Cess be levied, the determination of its exact rate and methods of the collection being left to an Expert Committee to assess with reference to each industry concerned. This cess should be utilised solely for the furtherance of technical and vocational education at the secondary stage taking into consideration the needs of each industry. Representatives of industry, trade and commerce should be associated with the programme of technical education. In regard to nationalised industries or concerns such as Railways and Communications, Posts and Telegraphs, a certain per-cent age of the net revenue from these undertakings might be made available for the promotion of technical education. They should really take the lead in encouraging technical education in all fields in order to improve the quality of the work turned out in their workshops or elsewhere.

(*ii*) *Public Philanthropy* : Public Philanthropy has played a notable part in the development of every kind of education in our country but in recent years its scope is becoming more and more limited, so that the extent of the aid expected from this source has greatly diminished. We do not want to go into the detailed causes of this change. Many educational institutions owed their inception and continued existence to a class that is fast disappearing. It seems to us that certain special incentives are required to attract philanthropic aid for educational purposes. Taking note of this, the Central Government has already passed certain rules under which contributions made to certain institutions like Universities and research institutes are upto a limit of Rs. 25,000, for secondary education and up to a limit of Rs. 50,000 for technical education may be exempted from operation of the Income-tax Act.

(*iii*) *Religious and Charitable Endowments* : We believe that, in certain States, provision has been made by an Act of the Legislature for some of the income of religious and charitable institutions being used for educational purposes. We consider that it would be a fair utilisa-

tion of these funds, if after meeting the necessary charges pertaining to the administration of these trusts, diversion of some of the surplus funds is made to education including secondary education. We trust that similar provisions will be made in other States where such legislation is not already in force.

(*iv*) *Estate Duties* : We would also recommend that amounts bequeathed to public institutions for general educational purpose in the will of a deceased person should not be subject to any duty by the Centre and that the whole of this amount should be appropriated to the educational purposes for which they are meant.

Other Measures to Relieve the Cost of Secondary Education

(*i*) *Exemption from Local Taxes on education Buildings* : We have been told that certain local bodies levy property tax on educational institutions and on their grounds which seriously affects their finances and restricts the scope of their improvement. If education is a national responsibility, it is not desirable that their buildings and grounds should be taxed and we recommend that whether they are situated in urban or rural areas, in Municipalities or in Corporations, they should be exempted from the levy of this tax. In many countries this is an accepted principle and instead of leaving such charges, Muncipalities and Corporations have established educational institutions of all grades out of their funds. The importance of educational institutions having adequate playgrounds and open spaces have been stressed by us else where. We recommend, therefore, that State Governments and the Centre should, wherever possible, allot lands to schools for playgrounds, buildings, agricultural farms and other similar purposes, without charging for them. Such allotment is made in the U.S.A. under the land grants scheme.

(*ii*) *Exemption of Books and Scientific Apparatus from Customs Duty* : Till such time as the necessary scientific apparatus and appliances can be manufactured in country, we recommend that educational institutions which have to obtain scientific apparatus and workshop appliances from abroad should be exempted from customs duty. We realise that this involves some difficulties but, with strict control and the provision of necessary information by the schools to the satisfaction of the Department of Education, it should not be impossible to implement this proposal. We likewise recommend that books for school libraries may be similarly exempted from duty.

Central Aid to Secondary Education

We are of the opinion that in view of the largest interest involved, financial aid from the Centre is necessary and may reasonably be expected.

This scheme of vocational educational and the introduction of vocational subjects in the school as recommended cannot possible be implemented in a satisfactoay manner unless Central aid is forthcoming, We have referred to some of the methods of augmenting the financial resources needed for secondary education of diversified types. We feel that so far as the Centre is concerned, certain direct responsibilities may be taken in the field of secondary education. The Centre may give financial aid for such purposes as the following :

(1) The production of secondary schools providing diversified courses, more particularly in the rural areas.

(2) The production of better books for childern and teachers.

(3) The establishment of institutions for training teachers in technical subjects.

(4) The establishment of centres for encouraging research in important problems of secondary education such as

(*a*) Curricula of studies

(*b*) Vocational guidance

(*c*) Physical and health education

(*d*) Methods of teaching

(*e*) Book production research

(*f*) Technique of examination

(5) Organization of refresher courses, seminars and conferences of headmasters and teachers.

6. Production of suitable educational films and audio-visual aids.

(7) Encouragement of approved experimental schools.

We feel that the active co-operation of the Centre with the States is essential to promote education in the country, to improve its quality and to carry on the necessary research in the different fields of education which may ultimately be incorporated in the educational system.

SUMMARY OF RECOMMENDATIONS

1. In matters connected with reorganisation and improvement of secondary education there should be close co-operation between the Centre and the States.

2. In order to promote vocational education a Board of Vocational Education should be constituted at the Centre consisting of the representatives of the concerned Ministries and other interests.

3. A cess called the Industrial Educational Cess be levied, the amount collected to be utilised for the furtherance of technical and vocational education at the secondary stage.

4. A certain percentage of the net revenue from nationalised industries or concerns such as Railways, Communications, Posts and Telegraphs etc., should be made available for the promotion of technical education in certain fields.

5. Contribution for the development of secondary education should be exempted from the operation of the Income-tax Act.

6. Surplus funds from the religious and charitable endowments should be diverted to educational purposes.

7. The amount bequeathed to public institutions for general educational purposes in the will of a deceased person should not be subject to any duty by the Centre and the whole of it should be appropriated to the educational purpose.

8. All educational institutions and the grounds attached thereto should be exempted from the levy of property taxes.

9. The State Governments and the Centre should, wherever possible, assign lands to schools for playgrounds, buildings or agricultural farms and other necessary purposes without any charge.

10. The educational institutions which have to obtain necessary scientific apparatus, workshop appliances and books for school library should be exempted from customs duty.

11. The Centre should assume a certain amount of direct responsibility for the contemplated reorganisation of secondary education and give financial aid for the purpose.

CHAPTER XV

THE SECONDARY SCHOOL AS WE VISUALIZE IT

In the preceding chapters, we have discussed the various aspects and issues pertaining to the reconstruction of secondary education. In this chapter we propose to present a composite picture of the secondary school as it would emerge if our proposals and recommendations are put into effect.

Provision of a Proper Environment

The first concern of the schools should be to provide for its pupils a rich, pleasant and stimulating environment which will evoke their manifold interests and make life a matter of joyful experiences. This is not an easy thing to achieve ; it demands a many-sided approach. To begin with, the physical enviroment of our schools with the exception of a few well-endowed schools, is generally so drab and depressing that it is not conducive to the building up of an *esprit-de-crops* or a sense of pride in the school. We realise that many schools work under considerable financial difficulties and it is idle to expect that they will be able to put up suitable buildings or provide proper furniture and equipment. But, we are not prepared to concede the point that it is impossible for such school to do anythings to improve their present material conditions. In fact, our observations have convinced us that, where the staff and the management have shown some vision and have been able to win the active cooperation of the students and the local community, financial difficulties have not stood in the way of the schools becoming reasonably "stream lined". Educational authorities and teachers often fail to realize what tremendous resources they have at their disposal in the hundreds of eager, lively, constructively disposed youngsters in their school. If their enthusiasm and practical aptitudes are properly and tactfully mobilized, they can themselves change the general appearance of the school-plant almost beyond recognition and, in this effort, the parents and the local community can be of immense help. We have no doubt that, under proper encouragement, students all over India can, if necessary, carry out minor repairs, white-wash school rooms, keep the school garden and compound in good shape, paint and polish the furniture, decorate the bare walls of their rooms with charts, pictures and illustrations and enliven them with flowers, wherever this lovliest of Nature's gifts is available. And, if the schools do become, as we have envisaged, an integral part of the life of the community and they begin to realize that their welfare is their own concern, the problem of resources will become much

easier, for there is no community of persons that is too poor to make some contribution for the improvement of its own school. We have stressed this question of the decoration of schools at the outset not only because it can give the students a new feeling towards their school but also because it cultivates a love of neatness and beauty and artistic taste which are at present lacking in some of our youth. We are anxious that our school should take the lead in the matter of improving their own physical environment. It is, however, essential that the students should actively share in this crusade for beauty—both in the matter of its creation and proper maintenance. If this is given to them ready-made like the furnished residence of a *nouveau-riche* it will not have the same educative effect ; for education primarily consists, as we have stressed more than once, in making and creating things of beauty and utility by our own efforts.

Promotion of Extra-curricular Activities

Given a clean, pleasent and well maintained school building, we would like the school to see if it can provide a richly varied pattern of activities to cater to the development of their childern's entire personality. It has to formulate a scheme of hobbies, occupations and projects that will appeal to, and draw out, the powers of children of varying temperaments and aptitudes. Putting the problem in these words obviously implies that we do not visualize this school as merely a place of formal learning, whose main concern is to communicate a certain prescribed quantum of knowledge, but rather as a living and organic community which is primarily interested in training its pupils in, what we have called, the gracious "art of living". Knowledge and learning are undoubtedly of value but they must be acquired as a bye-product of interested activity, because it is only then that they can become a vital part of the student's mind and personality and influence his behaviour. What this implies in terms of educational method we have discussed at some length in the relevant chapter. All that we need recall here is that the secondary school of the future must be transformed into an "activity school", because activity has an irresistible appeal for every normal child and is his natural path to the goal of knowledge and culture. But the "art of living" is a much more comprehensive concept than the acquistion of knowledge, however intelligently planned. It includes training in the habits and graces of social life and the capacity for co-operative group work ; it calls for patience, good temper, sincerity fellow feeling and discipline. These can only be cultivated in the context of the social life and the many curricular and co-curricular activities that must find a recognised place in every good school. We already discussed their place in the school programme and the many educational values that they can serve if they are organized intelligently and with vision. What we would like the teachers to bear in mind is that *these* have a double function to perform—on the one hand, they provide an opportunity for

students to develop their *individual* talents and capacities and self-confidence and, on the other, they lend themselves to being made the leaders in co-operative work which trains them in the division and integration of functions and in the allied qualities of discipline and leadership. We would like to see these schools humming with activities in which each student will be able to discover himself. One great advantage of the activity methods, that we have advocated for teaching curricular subjects, will be that the present rigid line of demarcation between the class room and the extra-curricular activities - carried on the leisure hours, on the playground or in the hobbies room or in the library—will disappear and all work will partake of the quality of play. We do *not* visualize that these schools will have dull, routine ridden, formal lessons in the class *plus* a number of independent, unrelated 'extra-curricular' activities which have no intrinsic relationship with them either in contents or methods. The entire programme of the school will be visualized as a unity and inspired by a psychologically congenial and stimulating approach, the so-called "work" being characterized by the feeling of job and self-expression usually associated with play and hobbies, and these letters having something of the meaningfulness and purpose which are normally considered a special feature of academic work.

In the planning of these activities, it is important to remember that they should be as varied as the resources of the school will permit. Academic activities like debates, discussions, dramas, school magazine, social magazine, social activities like the organizing of different functions for the school community as well as the local community, sports activitles, manual and practical activities, social service projects, art projects, must all be woven into a rich and unified pattern, within which every child will be able to find something to suit his tastes and interests. In the actual working out of these various activities, academic, social, practical and sporting—the teachers will find that there are really no rigid boundary walls between them. The production of a school magazine, for example, involves a number of activities and processes, which can coalesce together to form a most valuable experience to train the personality of the pupil. And the impact of a really well worked-out project whatever its nature, does not remain confined to its own special field but spreads out to irradiate various facets of personality. Thus, by planing a *coherent* programme of different activities, rich in stimuli, the school will not be frittering away either the time or the energy of the pupils but will be heightening their intellectual powers also side by side with training them in other fine qualities.

Provision of Craft and Productive Work

We expect this school to devote special attention to craft and productive work and thus redress the balance between theoretical and

practical studies which have been upset for many, many years. It will have a lively appreciation of the basic truth that "the education of a mind is essentially a process of revivifying in it the latent values contained in the goods of culture." In this process, educationally productive work, both intellectual and practical, plays a very important part; in fact it is the finest and most effective medium of education. It will, therefore, be reflected *both* in its curriculum and methods—that is, on the one hand, different practical subjects and craft work will find a place in the curriculum on the same status as the so-called "liberal" studies and on the other, the teaching methods will partake of the nature of activities and stimulate independent work. Every well established and reasonably well financed school will have workshops and craft-rooms wher students will learn to handle tools and to fashion different kind of materials into form. They will not be merely "flirting" with something called hand-work, which often offer little stimulating challenge to their practical aptitudes, but will actually be confronted with real jobs of work which will genuinely stretch their powers. These craft-rooms, workshops (and farms), no doubt, are specially meant for students who offer practical subjects like agriculture, engineering, domestic science, etc., but they also provide suitable practical occupations for *all* students including those who take up sciences or humanities or art subjects. Likewise, the school laboratory will not be a toy-affair, where a few simple and carefully planned experiments are performed under vigilant eye of the teacher who sees that the prescribed routine is followed. It will endeavour to give them something of the thrill and the joy of discovery and the educative experience of learning through trial and error, It would be wrong to imagine that practical work of this type cannot be carried out in secondary schools. It has been done by many progressive schools in different countries and one of the finest and stimulating accounts of what has actually been accomplished, in this way will be found in the story of the Public School at Oundle (England) as it developed under the inspiring leadership of its Head Master, Senderson*

School Library Service

This school of ours will also endeavour to build both a living library and an efficient library service. We have already stressed the importance of school libraries and given a few practical suggestions which can help to quicken the present dormant and depressing libraries into life. The library will be the hub and the centre of the intellectural and library life of the reorganized school and play the same part *vis-a-vis* all the other subjects as the laboratory plays for science subjects or the workshop for technical subjects. In fact, even in the case of scientific and

*The story of a great school "Master' by H.G. Wells and "Sanderson of Oundle", a biography written by his colleagues.

technical subjects it will have a very important role. An intelligent teacher and an interested class will raise, or find themeselves confronted with, many issues and problems in the course of their work—in history, geography, science, literature etc. No text could possibly provide the solution to all these problems or offer the information necessary for the purpose and no intelligent teacher will commit the folly of trying to do all the thinking, or discovering all the material, for his pupils. They will, therefore, naturally have recourse to the library as the sources, of the desired knowledge and the trained and understanding librarian will meet them half-way, direct them to the books and reference source, provide comfortable facilities for them to read and take down notes and co-operative drawn up their plans of work. Thus they will be trained in the art of purposeful reading and making their own way in the world of ideas. In addition to this, purely utilitarian function, the library will also provide facilities for developing their taste in the reading for pleasure which is most valuable and meaningful hobby. We feel that, if the teachers and the pupils are keen about it, they can certainly do a great deal to improve the physical environment of the library resources and to ensure its proper use even within limited finance.

The School as a Centre of Community

Another thing which will distinguish this school from most of the existing schools is that it will be organized *as a community*. We have discussed the *raison d'etre* of this transformation at some length ; we have stated that the starting point of educational reform must be the re-linking of the school to life and restoring of the intimate relationship between them which has broken down with the development of the formal tradition of education. How can that best be done ? We would like this school to become a centre of actual social life and social activities where the same kind of motives and methods are employed as operate in the life of and normal and decent human group. It will not confine itself to book learning and the teaching of prescribed knowledge and skill but it will give full room for the expression of the pupil's social impulses. It will train them, through practical experience in co-operation, in subordinating personal interests to group purposes, in working in a disciplined manner and in fitting means to ends. Discipline in the school will not be a matter of arbitrary rules and regulations enforced through the authority of the teachers helped by the lure of rewards or the fear of punishment. The students will be given full freedom to organize functions, to conduct many of the school activities through their own committees and even to deal with certain types of disciplinary cases. In this way, discipline will be maintained through the influence of the social group and it will gradually lead to the development of self-discipline. Above all, discipline will be ensured by providing for the students psychologically congenial types (and methods) of work which will fully capture their interest and

thus impose their own inherent discipline on them. Many teachers must have seen how, when a group of students is working on a really interesting project like staging a drama or arranging a prize distribution function, there is usually no problem of discipline. The sincere and spontaneous desire to do work as satisfactorily as possible ensure discipline automatically and, if some members of the group interfere in any way with its smooth working, the group opinion asserts itself and puts them right. It is this kind of discipline that we should llke to see built up in the school.

The school will, no doubt, be a community but it will be a small community within a large community and its success and vitality will depend on the constant interplay of healthy influences between it and the large community outside, What we would like to see is a two-way traffic so that the problems that arise in the home and community life and the realistic experiences gained there should be brought into schools so that education may be based on them and be intimately connected with real life, and on the other hand the new knowledge, skills, attitudes and values acquired in the school should be carried into the home life to solve its problems, to raise its standards and link up the teachers, parents and children in one compact and naturally helpful group. This principle will have other implications too. It will mean that students will take an active part in various froms of social service for the good of the community and the school will not only inculcate the ideals and a desire for social service but also provide opportunities and the necessary meterial facilities. If the village or the town or the particular area of the city in which the school is located is unclean or happens to be infested with mosquitoes and flies carrying disease or is compelled to use water that is impure, it will be the duty of the students to rouse the conscience of the local community to those evils and handicaps through effective forms of educative propaganda and also to do whatever they can to improve this state of affairs and to win the enlightened co-operation of the public in this task. Likewise, interested members of the community, engaged in various useful vocations and professions will be invited to the school from time to time to talk about their particular work, to show its place and significance in the life of the community, to discuss its difficulties as well as its rewards. In this way, outside life will flow into the school and lower, if not knock down, the walls which at present isolate it from the currents of life operating outside. There will also be a close parent-teacher's association in the school—not the usual kind of formal relationship which means inviting the parents to the school once or twice a year on the occasion of the Prize Distribution or the Parents' Day but continuous contact and exchange of ideas which will help them to understand each other's point of view. They will, thus, learn to co-operate in the common task of giving a better, more rational and more sympathetic deal to the children.

One of the dominant aims of the school in the provision of all these social and partial activities and in organizing class-work on a new basis will be to educate the character and inculcate the right kind of ideals and values in the students. It will be earnestly interested in the problem of moral and social training but will not hug the found illusion that this training can be provided through lessons in morality or civics or exhortations by the teachers on headmasters on important occasions. It will utilize fully the only two media through which character and personality can be really formed—the living force of personal example and the organization of every single item of school work in such a way that it will have the desired impact on the personality of the pupils. The teachers will realise that they cannot train character or inclucate discipline in the students unless they set before them an effective example of personal integrity, social sense and discipline But their example will only point the direction and the goal ; the actual process of training will consist in the students' discharging all other duties in such a way that it will irresistibly build up the requisite ideals and qualities of character. These will not remain "pinned to the wall" but will find hour-to-hour practical expressions in that way they carry on their studies, play their games, organize their social activities and perform all their tasks in and out of school. It is only when this supreme purpose inspires their hearts and minds and enters into every day activities that character can be built on enduring foundations and stand the strain and stress of later life. The teachers should, therefore, constantly think of how the academic and other activities of school life are reacting on the student's character and should frequently discuss this problem amongst themselves and formulate concerted plans of action.

Reorientation of Teachers

Teachers must develop a new orientation towards their work. They will not look upon their work as an unpalatable means of earning a scanty living but as an avenue through which they are rendering significant social service as well as finding some measures of self-fulfilment and self-expression. They will work as a team engaged in a high endeavour—with the Headmaster as a valued and more experienced member—and as a new problems and difficulties arise, they will be constantly conferring amongst themselves and using their collective wisdom and experience to find their solution. They will not be dominated by routine but will keep an open mind-receptive and experimental—and look upon their work as a great social and intellectual adventure. This would naturally imply an eagerness on their part to continue their study of psychology, of educational literature, and new educational ideas. Their relations with the students will be free and friendly ; they will try to study their psychology and their individual differences with sympathy and help them in their difficulties with tact. No school can develop into an educative

community, capable of releasing the student's creative capacities, if the teachers maintain a stiff, forbidding attitude towards their pupils and try to maintain their authority through various kinds of punishment whilst the pupils, on their part, stand in awe of them and are not prepared to share their problems and difficulties with them. That is an unnatural relationship which brings out the worst in both parties. It is not only a false but dangerous conception of prestige which builds up a wall between teachers and students. It is usually the weak and the diffident or the temperamentally handicapped teacher who takes refuge behind that kind of artificial prestige. The good teacher, in our reorganised school will endeavour to win the love and confidence of his children and establish his prestige on sincerity, integrity, hard work and a smypathetic handling of their problems.

The school will also considerably modify its methods and system of examination. As present, as we have poined out, teaching is entirely dominated by examinations. Students are educated not so much to acquire knowledge and understanding or the right attitudes as to pass examinations. In this school the emphasis will shift from examination to education ; teachers and children will concentrate on the real purpose of the school and will take examination in their stride. It is true that the pattern of the final secondary school examination is beyond their control and it may take some time before that is appreciably modified. But there is no reason why, for the lower classes, there should not be more rational and intelligent examination technique, as it is the Headmaster and the staff who largely decide the matter at the stage. Much greater credit can be given to the actual work done by the student from day to day, of which careful and complete records should be maintained. Moreover, in assessing his progress and his position, factors other than academic achievements, should be given due weight—his social sense intiative, discipline, co-operation, leadership, etc. Even in assessing academic achievements, they should not use one rigid yardstick but judge them with reference to the individual capacity and intelligence of each student. We are confident that, when the teachers' whole outlook on education is changed and they learn to appreciate the real proposes of the school, they will be able to make necessary adjustments in the methods of examination and make it an ally, rather than a hindrance, in the process of education.

Freedom of School

Above all, this school will enjoy a much greater degree of freedom than is vouchsafed to the schools at present. We have pointed out in our Report that there is a general complaint from headmasters that they are unduly fettered by the rules and regulations of the Department and are not able to put any new and creative ideas or suggestions into practice.

The teachers have, similarly complained that they have not enough freedom to work out their ideas and, in their case, it stated that often it is the headmasters who stand in a way. We trust that the Education Departments and their Inspecting Officers will see their way to giving greater freedom to schools in the matter of organizing the syllabus, selecting text-books and adopting teaching methods. But in addition to that—or even before this is done—there are certain elements of school work which the teachers and headmasters are really free to effect improvements in. We have already referred in this connection to class examinations. They have certainly to follow the general pattern of the curriculum but there is no reason why they should not, for example, enrich it by encouraging greater use of the library and the reading of significant books of general interest. They can adopt methods of work in the class-room which will allow students to work more freely and progress at their own pace. They will be given full freedom in organizing their various activities and extra-curricular projects. This freedom, which will embrace within its scope both staff and students, is a very exacting responsibility and all will have to be gradually trained to bear it worthily. But there is no other way of doing so than giving them the chance to work under conditions of freedom and to accept the risks that may be involved in the initial stages.

This is the picture of the reorganised secondary school as we visualise it. We realise that all schools may not be able to work up to it immediately. But it is not an impossible or unduly idealized picture and it does point the correct direction of advance. If the educational authorities and the teachers accept this conception of the school, we are of the opinion that, in spite of the many difficulties and handicaps that exist, it will be possible to bring about many welcome improvements in our schools. For, after all, what we have advocated is, in brief, a transformation of the schools into social communities where the healthy, normal motives and methods of group work are in operation and children have an opportunity of learning by doing, of gaining meaningful social experiences, and thereby being trained in the supreme "art of living". All the changes in the methods of teaching, in discipline and examination, all the improvements in the physical environment of the schools and its general atmosphere are meant to assist in this basic transformation. We repeat that it is a difficult, but not an impossible task and, if faith and enthusiasm are kindled in the teachers, they can move whole mountains of difficulties. For the teachers there can be no greater or deeper joy than providing for their students an educative environment in which they can lead a rich, joyous and meaningful life and not only acquire knowledge and skill but also find a release for their creative capacities.

CONCLUSION

We have in previous chapters reviewed the present position of secondary education and have suggested the improvements and changes that may be necessary if the education imparted to the youth of the country is to serve the needs of the individuals and meet the growing demands of the nation. At the outset one may express the doubt whether it would be possible to implement the recommendations made by the Commission in view of the present financial position of the country. Experience of the past, where similar recommendations have not received due consideration, may be quoted in support of such a pessimistic view. It will serve no useful purpose at this stage to ponder over the possible developments that might have resulted had the recommendations of the previous Commissions and Committees, so frequently reiterated since 1882, been implemented. But there is no doubt that India was in no worse position than several other countries in the eighties of the last century and the phenomenal developments and improvements that have taken place in these countries during the last sixty or seventy years must be an object lesson to this country to avoid, in future, lost opportunities and vacillating policies of the past. But whatever the reasons for failure to implement such recommendations in the past, the country cannot afford, after the attainment of Independence, to neglect or ignore the great and pressing problems of educational reconstruction or fail to take immediate steps to tackle them in a manner conducive to the promotion of the welfare of its citizens and safeguarding its future as a forceful and progressive Democratic Republic in the comity of nations.

We have, in the course of our review of the present state of education in the country, taken note of such factors as have had a deterrent effect on a sound development of education and have referred to two particular factors in this connection. The dominating influence of University requirements on the one hand, and the undue emphasis attached to the needs of public services and the present methods of recruitment on the other, have had an adverse effect not only on healthy development of secondary education but on the whole field of education in the country.

If, in future, such unhealthy trends are to be avoided and education is to be directed on right lines, a comprehensive view of education will have to be taken which will serve the needs of the individual, and of society and develop the resources of the country. In every field of national activity there is a great demand for a larger and better trained personnel to meet its growing requirements. The world of today is

different from what it was fifty or sixty years ago. International competition in all spheres of activity is becoming keener and keener. Industry, trade and commerce can best be promoted only if, in the field of Technical Education, standards are maintained at all levels, which are comparable to standards in other progressive countries. In all other spheres of intellectual activity, whether in Science, Humanities, Art or Culture, rapid progress is being made and new discoveries are being ushered in quick succession. These call for a general level of educational attainment which would make it possible for our people to absorb and utilise these discoveries and enable them to contribute their share to be furtherance of such knowledge. The attainment of political independence involves and implies the attainment of intellectual independence in several fields, and interdependence in fields, where fruitful co-operation is desirable and necessary for the furtherance of human welfare.

We realise that today, the State and the Centre are faced with a gigantic task in the field of education. In every sphere there is a great leeway to be made up. In the sphere of Basic Education, Secondary Education, Technical and Professional Education and in the higher spheres of scientific and humanistic studies the needs are so great and the demands so pressing that appreciation of urgent needs of the country and the standards that should be achieved may not be prominently kept in view. We have noted the great increase that has taken place during the last five years both in the number of schools and the total number of pupils studying in the States. Our pleasure in noting such rapid progress has, however, been diminished by the fact, so prominently brought to our notice, that this increase has largely been possible at the sacrifice, in some cases the serious sacrifice, of efficiency. If such deterioration is allowed to continue, the general level of students' attainment at all stages of education will be considerably lowered. Quality should not be sacrificed to quantity. We trust that in the spread of education, the educational authorities concerned would take note of these dangers and would adopt all possible measures to ensure that efficiency is not sacrificed in meeting the demands of expansion.

The importance of attaching the right type of individuals to the teaching profession has been repeatedly emphasised by us. If such individuals are to be drawn into the profession, it should be made sufficiently attractive, so that those who take it up as a noble form of national service may not be required to make too great a sacrifice of their material comforts and the anxieties and worries of the family life may not distract them from their professional duties.

We realise that every scheme of development involves a large financial liability which the State has to take due note of. Sometimes this financial liability is examined from the point of view of quick

returns, and hesitation creeps in because the returns can only be expected on a long term basis. A study of the steps taken by some other countries in making large financial provisions for education of diverse types should enable such persons and authorities to overcome their diffidence. Just as the large Hydro-Electric and Irrigation schemes now launched are likely to result in considerable development of the agricultural and other material resources of the country, so will be the fertilising of the fieid of the mind—only its results will be more outstanding and permanent in their beneficial effects. We are, therefore, of the opinion that the very high priority should be given to educational reform both by the State and the Central Government and that they should make every effort to find the necessary funds to implement these recommendations, and adopt a planned and co-ordinated policy for this purpose.

There is one other aspect of the problem to which attention has been drawn in the report. Education cannot be dealt with in water tight compartments, nor can the responsibility for such education be assigned to different Ministries or Departments without reference to one another. It is imperative that the different Ministries and Departments, at the Centre or in the States, should co-operate in educational planning and co-ordinate their activities so as to ensure efficiency and economy. We trust that this suggestion will receive serious consideration at the hands of the Govenments.

No scheme of educational reconstruction can be implemented with success without the active co-operation of the teaching profession and the sustained interest the teachers may take in such a task. We therefore, appeal to them to give their unstinted co-operation and support to the scheme of educational reconstruction that may be finally adopted by the States concerned taking due note of the recommendations that we have made. We are fully aware of the great difficulties and the serious handicaps under which the profession is now working, and it is our sincere hope that in the light of our recommendations the authorities concerned will take early steps to improve the status and emoluments of the teaching profession. This will serve to create in the teaching profession a sense of satisfaction and a desire for whole-hearted co-operation. In a new experimental venture such as this we feel that the teaching profession should be given scope for initiative and freedom in their task.

To the managements of educational institutions and to the general public we would like specially to address ourselves. On them depends largely the possibility of implementation of many of our recommendations and we hope and trust that with the same spirit in which they have encouraged all-round educational effort they will come forward to implement the suggestions made in respect of the bifurcated courses of study and the introduction of various subjects including the crafts.

The task that has been entrusted to us was not an easy one and if we have been able to make some useful recommendations, it is due to the sincere co-operation extended to us by officials and non-officials, by educationists and leaders of public opinion. It is our hope that these suggestions will be considered in the light of the special needs and circumstances of each State. But while we do not encourage a dead level of uniformity all over the vast sub-continent, we hope and trust that in essentials and in basic matters of policy there will be a reasonable degree of unanimity conducive to the maintenance of progress in all spheres of education. We are aware that, in some State, reports have already been presented by Committees appointed to review different stages of education, including Secondary Education. We have pursued these reports with profit and interest. We express the hope that the report presented by us and its recommendations will be taken into due consideration before final decisions are arrived at by the States concerned. We have also expressed the considered opinion that, in the interests of an all round development of the country and the improvement of its economic position, the Central Government should take an active part, both financially and otherwise, in the reconstruction of secondary education and co-operate with the States with the object of increasing the *tempo* of educational reform.

In this connection we suggest that in the light of the recommendations made in this Report and those made in the various State Committee Reports on Education, every State may prepare a plan, for a specified period(ten years) for the reorganisation of secondary education in the States concerned. Such a plan, taking into consideration the existing distribution of secondary schools of various types in urban and rural areas, should lay down clearly the priorities regarding the opening of multi-purpose schools, agricultural and technical high schools, transforming high schools into higher secondary schools, providing multiplicity of courses, proper distribution and location of schools and implementing the other recommendations. Many of these recommendations will entail additional finance. There are however, some recommendations which do not require heavy additional expenditure. Among these may be mentioned the introduction of new curricular, reorganisation of the training college courses and others. priorities should be laid down with regard to these also.

We consider it necessary and desirable that the public should be made familiar with the State plan as finally drawn up and we hope proper steps will be taken in every State to do so. When the plan is ready, a high-powered Committee should be appointed to give effect to it and to implement the various aspects of the plan according to the approved priorities.

We wish, in conclusion, to express our appreciation of the help and co-operation we received from our foreign colleagues. It was a real pleasure to work and discuss with them the many problems of education in our country, in the light of their experience. To our colleague and Member-Secretary, Shri A. Basu, we wish to convey our thanks for the help and assistance rendered by him throughout. We desire also to record our appreciation of the good work done and services rendered to the Commission by Dr. S. M. S. Chari, Assistant Secretary, and the office staff which gave us their unstinted co-operation and help.

A. L. MUDALIAR (*Chairman*)
J. CHRISTIE
KENNETH R. WILLIAMS
HANSA MEHTA
J. A. TARAPOREVALA
K. L. SHRIMALI
M. T. VYAS
K. G. SAIYIDAIN
A. N. BASU (*Member-Secretary*)

SUMMARY OF RECOMMENDATIONS

CHAPTER IV—NEW ORGANISATIONAL PATTERN OF SECONDARY EDUCATION

New Organisational Pattern

1. Under the new organisational structure, education should commence after a four or five years, period of primary or Junior Basic education and should include (a) the Middle or Senior Basic or Junior Secondary stage of 3 years, and (b) the higher Secondary stage of 4 years.

2. During the transitional stage the existing High schools and the Higher Secondary Schools should function on the lines laid down.

3. The present Intermediate stage should be replaced by the Higher Secondary stage which should be of four years' duration, one-year of the present Intermediate being included in it.

4. As a consequence of the preceding recommendations the first degree course in the University should be of three years' duration.

5. For those who pass out of the High school there should be provision for a pre-University course of one year, during which period the scheme of studies should be planned with due regard to the needs of the degree or the professional course to be taken by the students and special emphasis should be placed on the quickening of intellectual interests, training in method of study at college and the study of English so long as it continues to be the medium of instruction at the University.

6. Admission to professional colleges should be open to those who have completed the higher secondary course, or have taken the one-years' pre-University course.

7. In the professional colleges, a pre-professional course of one-year should be provided for the students, preferably in the professional colleges themselves, but, as a transitory measure,they may be given in the degree colleges where facilities exist, till professional colleges are able to provide for such courses.

8. Multi-purpose schools should be established wherever possible to provide varied courses of interest to students with diverse aims, aptitudes and abilities.

9. Those who have successfully completed such courses should be given opportunities to take up higher specialised courses in polytechnics or technological institutions.

10. All States should provide special facilities for agricultural education in rural schools and such courses should include Horticulture, Animal Husbandry and cottage Industry.

Technical Education

11. Technical schools should be started in large numbers either separately or as part of multi-purpose schools.

12. Central Technical Institutes should be established in large cities which may cater to the needs of several local schools.

13. Wherever possible technical schools should be located in close proximity to appropriate industries and they should function in close co-operation with the industry concerned.

14. Apprenticeship training being an important part of the training needed, suitable legislation should be passed making it obligatory for the industry to afford facilities to students for particular training.

15. In the planning of technical and technological education at all levels, representatives of commerce and Industry should be closely associated with the educationists so that in the planning and direction of such education and in the maintenance of standards their view may be given effective weight.

16. A small cess to be called the "Industrial Education Cess" should be levied on industries and the proceeds of this Cess should be used for the furtherance of technical education.

17. In the interests of evolving a suitable pattern of technical courses at the secondary stage, the all-India Council for Technical Education and the bodies functioning under it should be utilised for working out details of the courses.

Other Types of Schools

18. Public schools should continue to exist for the present and the pattern of education given in them should be brought into reasonable conformity with the general pattern of national education. Such schools should gradually become self-supporting, but during the transitional period of the next five years, State or Central assistance should be given to them on a gradually diminishing scale.

19. The States or the Central should provide for certain free studentship in them to be given on the basis of merit to selected students.

20. A number of residential schools should be established, more particularly in certain rural areas, to provide proper opportunities for the education of children and particularly to meet the needs of children whose education suffers at present owing to the exigencies of service of heir parents.

21. "Residential Day Schools" should be established in suitable centres to provide greater opportunities for teacher-pupil contact and for developing recreational and extra-curricular activities.

22. A larger number of schools should be established to meet the needs of handicapped children.

Co-Education

23. While no distinction need be made between education imparted to boys and girls special facilities for the study of home science should be made available in all girls' schools and co-education or mixed schools.

24. Efforts should be made by State Governments to open separate schools for girls wherever there is demand for them.

25. Definite condition should be laid down in regard to co-educational or mixed schools to satisfy the special needs of girl students and women members of the teaching staff.

CHAPTER V—STUDY OF LANGUAGES

1. The mother-tongue or the regional language should generally be the medium of instruction throughout the secondary school stage, subject to the provision that for linguistic minorities special facilities should be made available on the lines suggested by the Central Advisory Board of Education.

2. During the Middle School stage, every child should be taught at least two languages. English and Hindi should be introduced at the end of the Junior Basic stage, subject to the principle that no two languages should be introduced in the same year.

3. At the High and Higher Secondary stage, at least two languages should be studied, one of which being the mother-tongue or the regional language.

CHAPTER VI—CURRICULUM IN SECONDARY SCHOOLS

Curriculum

1. At the Middle School stage, the curriculum should include (i) Languages ; (ii) Social Studies ; (iii) General Science ; (iv) Mathematics ; (v) Art and Music ; (vi) Craft ; and (vii) physical Education.

2. At the High School or Higher Secondary stage, diversified courses of intruction should be provided for the pupils.

3. A certain number of core subjects should be common to all students whatever the diversified courses of study that they may take ; these should consist of (i) Language (ii) General Science, (iii) Social Studies, and (iv) a Craft.

4. Diversified courses of study should include the following seven groups ; (i) Humanities, (ii) Sciences, (iii) Technical subjects, (iv) Commercial subjects (v) Agricultural subjects, (vi) Fine Arts. and (vii) Home Sciences ; as and when necessary additional diversified courses may be added.

5. The diversified curriculum should begin in the second year of the High School or Higher Secondary School stage.

Textbooks

6. With a view to improving the quality of textbooks prescribed a high power Textbook Committee should be constituted which should consist of a high dignitary of the judiciary of the State, preferably a Judge of the High Court, a Member of the Public Service Commission of the region concerned, a Vice-Chancellor of the region, a headmaster or Headmistress in the State, two distinguished educationists and the Director of Education ; this Committee should function as an independent body.

7. A fund should be maintained from the amount realised from the sale of publications which may be utilised for awarding scholarships, and providing books and certain other amenities for shool children.

8. The Textbooks Committee should lay down clear criteria for the type of paper, illustration, printing and format of the book.

9. The Central Government should set up a new institution, or help some existing Art schools, to develop training in the technique of dook illustration.

10. The Central and State Governments should maintain libraries of blocks of good illustrations which could be loaned to Textbook Committees and publishers in order to improve the standard of book illustration.

11. Single textbooks should not be prescribed for every subject of study, but a reasonable number of books which satisfy the standards laid down should be recommended leaving the choice to the schools concerned.

12. In the case of languages, however, definite textbooks should be prescribed for each class to ensure proper gradation.

13. No book prescribed as a textbook or as a book for general study should contain any passage or statement which might offend the religious or social susceptibilities of any section of the community or might indoctrinate the minds of the young students with particular political or religious ideologies.

14. Frequent changes in textbooks and books prescribed for study should be discouraged.

CHAPTER VII—DYNAMIC METHODS OF TEACHING

1. The methods of teaching in schools should aim not merely at the imparting of knowledge in an efficient manner, but also at inculcating desirable values and paper attitudes and habits of work in the students.

2. They should, in particular, endeavour to create in the students a genuine attachment to work and a desire to do it as efficiently, honestly and thoroughly as possible.

3. The emphasis in teaching should shift from verbalism and memorization to learning through purposeful, concrete and realistic situations and, for this purpose, the principles of "Activity Method" and "Project Method" ; should be assimilated in school practice.

4. Teaching methods should provide opportunities for students to learn actively and to apply practically the knowledge that they have acquired in the class-room. "Expression Work" of different kinds must, therefore, form part of the programme in every school subject.

5. In the teaching of all subjects special stress should be placed on clear thinking and clear expression both in speech and writing.

6. Teaching methods should aim less at imparting the maximum quantum of knowledge possible and more on training students in the techniques of study and methods of acquiring knowledge through personal effort and initiative.

7. A well thought-out attempt should be made to adopt methods of instruction to the needs of individual students as much as possible so that dull, average and bright students may all have a chance to progress at their own pace.

8. Students should be given adequate opportunity to work in groups and to carry out group projects and activities so as to develop in them the qualities necessary for group life and cooperative work.

9. As the proper use of a well-equipped school library is absolutely essential for the efficient working of every educational institution and for encouraging literacy and cultural interests in students, every Secondary School should have such a library ; class libraries and subject libraries should also be utilised for this purpose.

10. Trained Librarians, who have a love for books and an understanding of students' interests, should be provided in all Secondary Schools and all teachers should be given some training in the basic principles of library work, in the Training Colleges as well as through refresher courses.

11. Where there are no separate Public Libraries, the school libraries should, so far as possible, make their facilities available to the local public and all Public Libraries should have a special section for children and adolescents.

12. In order to improve general standards of work in school. necessary steps should be taken to produce textbooks as well as books of general reading which are of distinctly superior quality to the books at present available.

13. Suitable literature for the guidance and inspiration of teacher should be produced by the Education Departments of all States and either the Office of the Director of Education or one of the Training Colleges should be adequatly equipped for the purpose.

14. In order to popularize progressive teaching methods and facilitate their introduction, "Experimental" and "Demonstration" schools should be established and given special encouragement where they exist, so that that may try out new methods freely without being fettered by too many departmental restrictions.

CHAPTER VIII—THE EDUCATION OF CHARACTER

Discipline

1. The education of character should be envisaged as the responsibility of all teachers and should be provided through every single aspect of school programme.

2. In order to promote discipline, personal contact between teacher and the pupils should be strengthened ; self-government in the form of house system with prefects or monitors and student-councils, whose responsibility will be to draw up a Code of conduct and enforce its observance, should be introduced in all schools.

3. Special importance should be given to group games and other co-curricular activities and their educational possibilities should be fully explored.

4. Suitable legislation should be passed making it an election offence to utilise students below the age of 17 for the purpose of political propaganda or election compaigns.

Religious and Moral Instruction

5. Religious instruction may be given in schools only on a voluntary basis and outside the regular school hours, such instruction being confined to the children of the particular faith concerned and given with the consent of the parents and the managements.

Extra-Curricular Activities

6. Extra-curricular activities should form an integral part of education imparted in the school and all teachers should devote a definite time to such activities.

7. The State should give adequate financial assistance to the Scout Movement and should help to secure suitable sites for Scout Camps; schools should, as far as possible, afford an opportunity for group of their students to spend a few days every year at such camps.

8. The N. C. C. should be brought under the Central Government which should take the responsibility for its proper maintenance, improvement and expansion.

9. Training in First Aid, St. John's Ambulance and Junior Red Cross work should be encouraged in all schools.

CHAPTER IX—GUIDANCE AND COUNSELLING IN SECONDARY SCHOOLS

1. Educational guidance should receive much greater attention on the part of the educational authorities.

2. In order to broaden the pupils' understanding of the scope, nature and significance of various occupations of industries, films should be prepared to show the nature of the work in various industries and this should be supplemented by actual visits.

3. The services of trained Guidance Officers and Career Masters should be made available gradually and in an increasing measure to all educational institutions.

4. The Centre should take up the resposibility of opening in different regions centres of training for Guidance Officers and Career Masters to which each State may send a number of teachers or other suitable persons for training.

CHAPTER X—THE PHYSICAL WELFARE OF STUDENTS

Health Education

1. A properly organized school medical service should be built up in all States.

2. A thorough medical examination of all pupils and necessary follow-up treatment where necessary should be carried out in all schools.

3. Some of the teachers should be trained in first aid and general principles of health so that they may co-operate intelligently with the medical staff.

4. Proper nutritional standards should be maintained in hostels and residential schools.

5. The school should assist, where possible, in the maintenance of the sanitation of the area and the school children should thus be trained to appreciate the dignity of manual labour.

Physical Education

6. Physical activities should be made to suit the individual and his capacity for physical endurance.

7. All teachers below the age of 40 should activelv participate in many of the physical activities of students and thus make them a lively part of the school programme.

8. Full records of physical activities of the students must be maintained.

9. The training in physical education should be comprehensive enough to include all aspects of health education.

10. The teachers of physical education should be associated with the teaching of subjects like physiology and Hygiene and given the same status as other teachers of similar qualifications.

11. The existing facilities for training of teachers of physical education should be expanded by increasing the seats in the existing colleges, by opening new colleges where necessary and by reorganizing some of the institutions as all-India Training Centres to which aid may be given both by the Centre and the States.

CHAPTER XI—A NEW APPROACH TO EXAMINATION AND EVALUATION

1. The number of external examinations should be reduced and the element of subjectivity in the essay-type tests should be minimised by introducing objective tests and also by changing the type of questions.

2. In order to find out the pupil's all-round progress and to deter mine his future, a proper system of school records should be maintained for every pupil indicating the work done by him from time to time and his attainments in the different spheres.

3. In the final assessment of the pupils due credit should be given to the internal tests and the school records of the pupils.

4. The system of symbolic rather than numerical marking should be adopted for evaluating and grading the work of the pupils in external and internal examinations and in maintaining the school records.

5. There should be only one public examination at the completion of the secondary school course.

6. The certificate awarded should contain besides the results of the public examination in different subjects, the results of the school tests in subjects not included in the public examination as well as the gist of the school records.

7. The system of compartmental examinations should be introduced at the final public examination.

CHAPTER XII—IMPROVEMENT OF THE TEACHING PERSONNEL

Improvement of the Teaching Personnel

1. A reasonable uniform procedure should be devised for the selection and appointment of teachers for all types of schools.

2. In all privately managed institutions and in schools maintained by local boards there should be small Selection Committee entrusted with the responsibility of recruiting the staff, with the headmaster as an *ex-officio* member.

3. The normal period of probation for a trained teacher should be one year.

4. Teachers working in High Schools should be graduates with a degree in education ; those who teach technical subjects should be graduates in the subject concerned with the necessary training for teaching it ; teachers in Higher Secondary Schools should possss higher qualifications somewhat similar to those prescribed in some Universities for teachers of the Intermediate Colleges.

5. The teachers possessing the qualifications and performing the same type of work, should be treated on a par in the matter of grades of salary irrespective of the type of institution in which they are working.

6. Special Committees should be set up to review the scales of pay of teachers of all grades and recommend such scales of pay that will meet in a fair and just manner the varying cost of living.

7. In order to relieve teachers from anxieties about their own and their dependents' future which will affect the efficiency of their work, the system of triple benefit scheme, pension-cum provident fund-cum-Insurance, should be introduced in all States.

8. Arbitration Boards or Committees should be established to look into the appeals and grievances of teachers and to consider matters relating to suspension, dismissal etc.

9. The age of retirement in the case of physically fit and competent teachers may be extended to 60 with the approval of the Director of Education.

10. The children of teachers should be given free education throughout the school stage.

11. Through a system of cooperative house building societies, teachers should be provided with quarters so as to enable them to live near the school and devote more time to the many sided activities of the school.

12. Teachers wishing to go the health resorts or holiday camps or to attend education conferences, seminars, etc. should be given travel concessions and leave facilities.

13. They should be given free medical attention and treatment in hospitals and dispensaries.

14. The leave rules should, as far as possible, be uniform for all educational institutions.

15. Opportunities should be provided on a generous scale for teachers to visit different institutions within the country and in special cases to go abroad on study leave for higher studies.

16. The practice of private tuitions by teachers should be abolished.

17. Persons in high public position should give special recognition to the teachers' social status and the dignity of their profession.

18. In order to attract persons of the right type to the responsible position of the headmaster, the emoluments of the post should be made sufficiently attractive.

Teacher Training

19. There should be only two types of institutions for teacher-training : (i) for those who have taken the School Leaving Certificate or Higher Secondary School Leaving Certificate, for whom the period of training should be two years ; and (ii) for graduates for whom the training may for the present, be of one academic year, but extended as a long-term programme to two academic years.

20. Graduate teacher-training institutions should be recognised by and affiliated to the Universities which should grant the degrees, while the secondary grade training institution should be under the control of a separate Board appointed for the purpose.

21. The teacher trainees should receive training in one or more of the various extra-curricular activities.

22. The Training Colleges should, as a normal part of their work, arrange refresher courses, short intensive courses in special subjects, prctical training in workshops and professional conferences.

23. The training colleges should conduct research work in various important aspects of pedagogy and for this purpose it should have under its control an Experimental or Demonstration school.

24. No fees should be charged in training colleges, while during the period of training all the student-teachers should be given suitable stipends by the State ; the teachers who are already in service should be given the same salary which they were getting.

25. All Training Colleges should provide adequate residential facilities so as to be able to arrange community life and other suitable activities for the trainees.

26. For the Master's Degree in Education only trained graduates who have normally done a minimum of three years teaching should be admitted.

27. There should be a free exchange between professors in Training Colleges, selected Headmasters of schools and Inspecting Officers.

28. In order to meet shortage of women teachers special part-time training courses should be provided.

CHAPTER XIII—PROBLEMS OF ADMINISTRATION

Organisation and Administration

1. The Director of Education should be the officer mainly responsible to advise the Minister and for this purpose, it is necessary that he should have at least the status of a Joint Secretary and should have direct access to the Minister.

2. A Committee should be constituted both at the Centre and in each State consisting of the Ministers concerned with the various grades and types of education in order to discuss how best the resources of the departments could be pooled for the furtherance of education of all types.

3. There should be a Coordinating Committee consisting of the departmental head concerned with the different spheres of education in order to consider methods of improvement and expansion in all fields of education.

4. There should be a Board of Secondary Education consisting of not more than 25 members with the Director of Education as its Chairman to deal with all matters of education at the secondary stage and to lay down general policies.

5. A Sub-Committee of the Board should deal with the conduct of examinations.

6. There should be a Teacher's Training Board for supervising and laying down the conditions necessary for the proper training of undergraduates and for suggesting, for the consideration of the Universities, improvements that may be needed in the training of graduates.

7. The existing Central Advisory Board of Education should continue to function as a coordinating agency to consider all-India problems concerning education and State Advisory Boards should be constituted on similar lines in each State to advise the Department of Education on all matters pertaining to education.

Inspection of Schools

8. The true role of an Inspector should be to study the problems of each school and view them comprehensively in the context of educational objectives, to formulate suggestions for improvement and to help the teachers to carry out his advice and recommendations.

9. Special Inspectors or panels of Inspectors should be appointed to inspect the teaching of special subjects like Domestic Science, Art, Music, etc.

10. Persons selected as Inspectors should possess high academic qualifications, adequate teaching experience or experience as Headmasters of High Schools for a minimum prescribed period. In addition to direct recruitment, Inspectors should also be drawn from (i) teachers of ten years' experience, (ii) Headmasters of High Schools, and (iii) duly qualified staff of Training Colleges who may be allowed to work as such for a period of three to five years.

11. The Inspectors should have a competent staff to help them in the discharge of their administrative duties.

12. In order to evaluate the academic side of activities of a school there should be a panel of experts with the Inspector as Chairman to inspect the schools.

13. Three persons may be chosen from senior teachers or Headmasters to visit the schools in the company of the Inspector and to spend two or three days with the staff, discussing with them and with the school authorities all aspects of school life and problems.

Managements and Conditions of Recognition of Schools

14. Recognition to schools should be given only on clearly defined conditions which will ensure their proper running and the maintenance of proper standards.

15. The Managing Boards of all schools should be registered and should cansist of a limited number of persons with the Headmaster as an *exofficio* member.

16. No member of the Managing Board should directly or indirectly interfere with the internal administration of the school.

17. Every management should be required to draw definite rules of service wherein the conditions pertaining to salary, leave, etc. should be definitely laid dawn.

18. For proper running of a school every management should be required to provide an endowment and the income accruing from this should be shown in the receipts of the year.

19. The scales of fees fixed by the management of a school should be subject to approval by the Department of Education.

20. A committee should be appointed when necessary by the Department of Education to go into the question of levying a uniform scale of tution fees and other fees and all accounts of the school should be subject to audit by the Department.

21. The managements should satisfy the Department that qualified staff is available and will be appointed in accordance with the rules laid down by the Department for affiliation.

22. The management should satisfy the Department that adequate accommodation and equipment, etc have been provided for the efficient running of the school.

23. The number of sections in each class should be limited and before any increase in the numbers of sections is made, the prior approval of the Department should be obtained.

24. In the interest of the general efficiency of schools, rules should be framed preventing undue competition amongst neighbouring schools.

25. The teaching staff should not be limited to any particular caste or community but should, as far as possible, be recruited on a wide basis.

26. In view of the importance and urgency of providing diversified courses of instruction, financial aid and encouragement should be given to the existing school as well as the new schools providing diversified courses of study.

27. Managements should obtain prior approval of the Director of Education before opening schools and the approval should not be given unless the minimum conditions prescribed have been scrupulously fulfilled.

School Building and Equipment

28. Secondary schools should be established in rural areas in central places with sufficient population which are easily accessible to the surrounding villages.

29. Schools in urban areas should, as far as possible, be so located that they are free from the noise and congestion of the city and necessary transport facilities should be made available for students.

30. The open spaces available in cities must be conserved to be utilised as playground by groups of schools and the State and Central Governments should prevent, through legislation, encroachment on them for industrial or commercial purposes or by housing societies.

31. Normally, in designing buildings for schools, care should be taken to see that an area of not less than 10 sq. ft. is provided per student in the class room.

32. The optimum number of boys to be admitted to any class should be 30 and the maximum should not in any case exceed 40 ; the optimum number in the whole school should be 500 while the maximum should not exceed 750.

33. The schools constructed in future should provide facilities for the introduction of diversified courses.

34. In the type design of schools as well as the furniture, etc., research should be carried on to improve functional efficiency and to adjust them to Indian conditions.

35. Expert committees should be appointed to lay down carefully the amount and the kind of equipment required for various types of diversified courses and workshops.

36. Cooperative stores should be established in all schools where books, stationery and other materials required by students are made available to them at cost price.

37. So far as possible, quarters should be provided for teachers in rural areas as well as urban areas to attract suitable persons to the profession and to facilitate developement of a corporate community life in the schools.

Hours of Working and Vacations

38. Considerable latitude should be given to schools to arrange their school hours in such a way as not to interfere with the activities of the community and the general climatic and occupational conditions prevailing in the locality.

39. As a rule the total number of working days in a school should not be less than two hundred, the working hours per week should be at least thirty-five periods of about forty-five minutes each; the school should work regularly for six days in the week, one of the days being a half day when the teachers and students might meet informally and work together on various extra-curricular and social projects.

40. School holidays need not be identical with public holidays as declared by the Government and normally during the year there should be a summer vacation of two months and two breaks of ten to fifteen days at suitable periods during the year.

Recruitment to Public Services

41. That selection for and recruitment to public service should be made successively at definite age periods *i.e.* the age of 16 to 18,19 to 21, 22 to 24.

42. For a transitional period, this method of recruitment on the basis of age groups should be tried for about 50% of the posts, while the other 50% should be recruited on the present basis and this proportion should be gradually reduced.

43. A careful study should be made of the present conditions of recruitment with particular reference to the relationship between the University degrees and public services and such degree qualification should be prescribed only for posts that require such high academic attainments ; for this purpose, a committee should be appointed to go into the whole system of recruitment to public service and to consider how far the methods of recruitment could be improved and related intelligently to the different levels of education,

CHAPTER XIV—FINANCE

1. In matters connected with reorganisation and improvement of secondary education there should be close cooperation between the Centre and the States.

2. In order to promote vocational education, a Board of Vocational Education should be constituted at the Centre consisting of the representatives of concerned Ministries and other interests.

3. A cess called the Industrial Education Cess be levied, the amount collected to be utilised for the furtherance of technical and vocational education at the secondary stage.

4. A certain percentage of the net revenue from nationalised industries or concerns such as Railways, Communications, Posts and Telegraphs etc. should be made available for the promotion of technical education in certain fields.

5. Contributions for the development of secondary education should be exempted from the operation of the Income-tax Act.

6. Surplus funds from the religious and charitable endowments should be diverted to educational purposes.

7. The amount bequeathed to public institutions for general educational purposes in the will of a deceased person should not be subject to any duty by the Centre and the whole of it should be appropriated to the educational purpose.

8. All educational institutions and the grounds attached thereto should be exempted from the levy of property taxes.

9. The State Governments and the Centre should, wherever possible, assign lands to schools for playgrounds, building or agricultural farms and other necessary purposes without any charge.

10. The educational institutions which have to obtain necessary scientific apparatus, workshop appliances and books for school library should be exempted from customs duty.

11. The Centre should assume a certain amount of direct responsibility for the contemplated reorganisation of secondary education and give financial aid for the purpose.

APPENDICES

APPENDIX 1

COPY OF GOVERNMENT OF INDIA RESOLUTION NO. F 9-5/52- B.I.,

DATED THE 23RD SEPTEMBER, 1952

The Central Advisory Board of Education at its Fourteenth Meeting held in January, 1948 recommended the appointment of a Commission to examine the prevailing system of secondary education in the country and suggest measures for its reorganisation and improvement. At its meeting held in January, 1951, the Board reiterated its former decision and pressed for early implementation of its recommendation in view of the urgent need for the reconstruction of education at this level.

2. While the problems of education at the Elementary and the University stages have been surveyed in recent years and steps have also been taken to improve and coordinate facilities for technical education, there has been no comprehensive or thorough examination of the problems pertaining to secondary education. This is however the stage which marks the completion of education for the large majority of pupils. Further, it is the secondary schools that supply teachers to the primary schools and students to Universities. An inefficient system of secondary education is therefore bound to affect adversely the quality of education at all stages.

3. There are other consideration which also make a survey of secondary education at the present time necessary. One of the major defects of the prevailing system of secondary education is its unilinear and predominantly academic character. A fairly uniform system of elementary education may serve the needs of children but cannot fulfil the requirements of adolescents at the seeondary stage when differences in aptitudes and interests begin to be clearly shown. The need for the reorganisation of secondary education with diversified courses has become more urgent as a result of the acceptance by the Government of India and the State Government of Basic Education as the pattern of education at the elementary stage.

4. In view of these consideration, the Government of India have decided to set up a Secondary Education Commission consisting of the following members with instruction to submit its report as soon as may be feasible :

1. Dr. A. LAKSHMANASWAMI MUDALIAR,
   Vice- Chancellor, Madras University, Madras, *(Chairman).*

2. Principal JOHN CHRISTIE,
   Jesus College, Oxford.

3. Dr. KENNETH RAST WILLIAMS,
   Associate Director, Southern Regional Education Board, Altanta (U.S.A.).

4. Mrs. HANSA MEHTA,
   Vice-Chancellor, Baroda Uuiversity, Baroda.

5. Shri J. A. TARAPOREVALA,
   Director of Technical Education, Government of Bombay, Bombay.

6. Dr. K. L. SHRIMALI,
   Principal, Vidya Bhavan Teachers' Training college, Udaipur.

7. Shri M. T. VYAS,
   Principal, New Era School, Bombay.

8. Shri K. G. SAIYIDAIN,
   Joint Secretary to the Government of India, Ministry of Education, (Ex-Officio Member).

9. Principal A. N. BASU,
   Central Institute of Education, Delhi (Member Secretary,

5. For the duration of the Commission's stay in any State, the State Government may, if it so desires, appoint a person to serve as a Member of the Commission on such terms and conditions as the State Government concerned may determine the consultation with the Government of India.

6. The terms of reference of the Commission will be :

(a) to enquire into and report on the present position of secondary education in India in all its aspects ; and

(b) suggest measures for its reorganisation and improvement with particular reference to—

(i) the aims, organisation and content of secondary education ;

(ii) its relationship to Primary, Basic and High Education ;

(iii) the inter-relation of Secondary Schools of different types ; and

(iv) other allied problems;

so that a sound and reasonably uniform system of secondary education suited to our needs and resources may be provided for the whole country.

APPENDIX II

GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
THE SECONDARY EDUCATION COMMISSION

QUESTIONNAIRE

Note:—The questionnaire covers a wide field of inquiry and it is not intended that all those who are pleased to send replies should necessarily answer every question. Correspondents are requested to favour the commission with their views and suggestion on matters in which they are particularly interested or of which they have special knowledge.

The questionnaire consists of eight sections. The number of the section and the question to which the answer or memorandum relates may please be clearly indicated in each case.

Replies written on the blank pages opposite to the question, may please be sent to the Secretary, Secondary Education Commission, Central Institute of Education, Delhi-9, by the 30th of september, 1952.

1. AIMS & OBJECTIVES

1. (a) How would you define the aims and objectives of secondary education ?

(b) How would you distinguish them from the aims of primary education on the one hand and of University education on the other ?

(c) How far do you think these objectives have been realised in practice ?

2. (a) How far do you consider the presen systemt of secondary education to be satisfactory ? What, in your opinion, are its main defects and short comings ?

(b) In what ways would you suggest a reorientation of the present system so as to realise the aims and objectives stated above ? Please suggest concrete steps for the purpose.

II. ORGANISATION

1. (*a*) What is the present duration of the Secondary course in your State ?

   (*b*) What, in your opinion should be the lengh of the entire school course and the Secondary course ?

2. (*a*) How would you divide it into stages ? Should the stages be completely separated ?

   (*b*) At what age should be secondary stage begin ?

   (*c*) Should there be any fixed age for admission to the primary school, the secondary school, to the University ? If so, what should be these ages ?

3. (*a*) At what age does a student usually sit for the Secondary School Leaving Examination ?

   (*b*) What period of schooling would you consider essential for Secondary School Leaving Examination and what age-limit, if any, would you suggest for candidates appearing in that examination ?

4. (*a*) What should be the relationship between the different stages of education ?

   (*b*) Does the present system of secondary education logically follow in sequence the system of primary education ? At what stage of the secondary school course do pupils normally join the institution ?

   (*c*) How would you integrate the secondary stage with the primary (Basic) stage on the one hand and the University stage on the other.

5. What should be the relationship between post-basic schools and secondary schools ? Should they have a party of status for all purposes.

6. (*a*) What should be the relationship between secondary education and technical and vocational education at the pre-University level ?

   (*b*) Can provision be made in secondary schools for vocational training ?

7. Should the Secondary stage be further divided into junior and senior stages ?

8. Assuming that at the secondary stage we shall have to cater for different types of children with different abilities and aptitudes, how would you like to organise the secondary school system from this point of view ?

   (*a*) by providing different parts of school ? or

   (*b*) by providing omnibus or multi-lateral schools with a system of electives ?

9. What are the advantages of system you advocate ?

10. At what stage should such electives be taken ?

11. How would you divide and group the electives ?

    (*a*) Academic ;

    (*b*) Practical ;

    (*c*) Technical ;

    (*d*) According to some other classification ?

12. What subjects or courses would you include under each heading ?

13. (*a*) If you favour multi-lateral schools, do you think that every school should have a technical *cum* vocational department ?

    (*b*) Is it possible to relate technical courses with local industries ? If so, how could this be done ? Give definite suggestions.

14. What principles in your opinion should be followed in starting technical, vocational and trade schools ?

15. (*a*) What, in your opinion, is the place of (i) public schools, and (ii) residential schools in the system of secondary education ?

(*b*) How can these two types of schools be fitted into the general system of education ?

(*c*) What should be the policy of the Government towards these two types of schools ?

16. (*a*) How far can the special features of the public schools be introduced into the Day Schools ?

(*b*) Are you in favour of Day Boarding Schools ?

17. Are you in favour of co-education in secondary schools ? If so, how and under what conditions can co-education be permitted in these schools ?

18. (*a*) What is the strength allowed for each class in a secondary school in your area ?

(*b*) What is the maximum number permitted in a school and what are the maximum number of divisions that are permitted in a class ?

19. Is there a shift system in your area ; and if so, how does it work ?

20. Do you favour the shift system ?

21. What do you think should be the size of a class, the number of pupils in each class, the number of sections that may be allowed for any class ; the minimum, optimum and the maximum strength of secondary schools ?

22. Should there be any selection in matter of admission to secondary schools and if so, what should be the basis of such selection ?

23. (*a*) What are the terms in the academic year ? (Mention the months which comprise each term and what period of summer vocation is allowed).

(*b*) Is there a minimum number of working days prescribed ?

(*c*) What are the usual hours of work and how are the period divided and how many days in a week do the classes normally work ?

(*d*) Would you suggest any change in the hours of work in the number of working days in week ?

(*e*) What should be the minimum number of working days in a year that must be enforced ?

(*f*) Would you suggest any change in the system of giving holidays and vacations ? Should they be the same for rural and urban areas ?

(*g*) Do you approve of the system of holidays now provided for all religious festivals ?

(*h*) Do you approve of the system of giving one long vacation in the year ? If not, what would you like to have in its place ? What system of breaks between working periods would you suggest ?

24. What provision is there for medical care of school children ? What should be the nature, extent and scope of such provision ?

25. (*a*) Are there hostels or dormitories attached to institutions ?

(*b*) What is the percentage of students from outside the town or village in which the secondary school is situated, needing hostel accommodation ?

(*c*) Is there a real need for such hostels ?

26. (*a*) Have you any suggestions regarding the location of schools ?

(*b*) Would you like to impose any restrictions in the matter of locating schools ? If so, give details.

III. ADMINISTRATION AND SUPERVISION

1. What are the types of management in your State in charge of secondary schools ?

2. What is the relationship of the management with the Department of Education and the Government ?

3, Should all secondary schools be private or State, or should there be both types ? *i.e.* (Are private schools to be encouraged ? Or should there be only State/Government schools ?)

4. (*a*) What should be the policy of the Government towards private unrecognised schools, tutorial institutions, etc. ? Should they be encouraged ?

(*b*) What are the present requirements for recognition of the secondary schools and what should be the minimum requirements for this purpose ?

5. (*a*) Is there a grant-in-aid code in your State ? If so What are the general principles thereof ?

(*b*) If private schools are to be aided, what should be the system of aid to be followed ? (i) block grant, (ii) teachers' salary grant, (iii) *per capita* grant, or (vi) any other system ?

(*c*) What are the advantages and disadvantages of (i), (ii), (iii), and (iv) ?

6. Should secondary education be the responsibility of

(i) State Governments, and/or

(*ii*) Local bodies, and/or

(*iii*) private bodies ?

please given reasons for your answers.

7. Which is the body responsible for the control of secondary education

(*i*) to determine standards,

(*ii*) to prescribe text-books and syllabuses,

(*iii*) for the appointment of paper-setters and examiners,

(*iv*) for conduct of examinations,

(*v*) for publication of result,

(*vi*) for discipline and welfare of students, and

(*vii*) for inspection of insititutions preparing candidates for secondary School Leaving Certificate Examination and to see that the conditions laid down are observed?

8. What is the relationship of the body responsible for Secondary Education and the Department of Education of the States ?

9. What is relationship of the body responsible for secondary education and the University ?

10. Inspectorate :

(*a*) What should be the essential qualification for the Inspectorate :

(*i*) Teaching experience ? and/or

(*ii*) Degree or diploma in education ? and/or

(*iii*) *Special training* for inspectorial work ?

(*b*) How can inspection of secondary schools be made more constructive and effective ?

(*c*) What should be the organisation of the Inspectorate for secondary education ?

(*d*) Do you favour periodic interchange between inspecting and teaching staff in schools and Training Colleges ?

IV. CURRICULUM

(including Co-curricular activities)

1. (*a*) What subjects should be taught in the secondary schools ?

(*b*) Should all subjects be taught throughout the entire secondary course ? If not, indicate the stages for the introduction and termination of study of particular subjects.

(*c*) Should there be a separate and special course for girls ? If special courses are suggested, what should be such courses ?

(*d*) Do you consider the present curriculum heavy or light ? Give reasons for your answer.

2. What is the present medium of instruction in Primary (Basic) schools and in secondary school of different types ?

3. (*a*) What, in your opinion, should be the medium of instruction in secondary schools of different types ? Specify giving reasons.

(*b*) What will be the position of the linguistic minorities in this scheme ?

4. (*a*) How many languages are to be taught (either as compulsory or optional) in (i) the junior high school, and (ii) the senior high school ?

(*b*) What is the place of the mother-tongue, the federal language, English and the classical language in the scheme of studies ?

(*c*) (*i*) At what stage should the federal language be introduced and for how long should it be continued ?

(*ii*) At what stage should English be introduced and for how long should it be continued ?

(*iii*) What should be the position of the regional language in this scheme (specially when it differs from the child's mother-tongue) ?

5. Should history, geography, civics and economics be taught as one subject—social studies—both in the junior and senior high schools ?

6. Should general science be a compulsory subject in the Junior School stage, to be differentiated later ? Or should it continue till the end of the secondary course ?

7. Would you consider it desirable to test a candidate in general knowledge at the school leaving stage ?

8. (*a*) What place should handicrafts play in the scheme of secondary education ?

(*b*) Would you favour every secondary school teaching at least one craft ?

9. (*a*) It has been suggested that as India is predominantly an agricultural country, it is necessary that Agriculture should be one of the subjects of study at all stages of education. What are you views on this subject ?

(*b*) If Agriculture is to be a subject of study at the secondary school what in your opinion, should be the stage at which it should be introduced and what should be the duration of the course and the subjects of study ?

(*c*) What would you suggest as the plan for practical training in the subject ?

10. Would you suggest separate Agricultural schools ? If so, where would you locate them and what would you suggest should be the requirements needed for starting such a school ? What will you suggest as the requirements for the practical training needed ?

11. Do you think that those who are trained in such schools, should have facilities for higher study ? If so what courses of higher study would you recommend for them ?

12. What would you suggest as the qualifications needed for teachers in such Agricultural schools and what emoluments would you suggest for them ?

13. What ancillary subjects of study would you suggest for those who wish to study Agriculture in Secondary Schools ?

14. What steps would you suggest for adoption to enable those who qualify in Agriculture to pursue the subject in after-life.

15. (*a*) Should there be prescribed books or only courses of studies ?

(*b*) What are (i) advantages, and (ii) the disadvantages of prescribing books ?

(*c*) If books are to be prescribed, what should be the prescribing authority ?

16. It has been suggested that the elements of (i) logic (or the art of thinking) and (ii) psycnology should form part of the secondary school courses ? What is your opinion on this point ?

17. At what stage should specialization begin and to what extent should it be allowed ?

18. (*a*) What kinds of co-curricular (extra-curricular) activities do you have in your schools ?

(*b*) How much time do you give for such activities (in hours) per week ?

(*c*) Do you feel the need for giving more time for such activities ?

(*d*) If so, how much more ?

(*e*) Will there be a defference between the junior and senior stages in this matter ?

(*f*) What other activities besides those you already have, would you encourage provided you have the time and necessary facilities for them ?

19. What facilities for art and music should be provided in secondary schools ? Should such provision be made both for boys' and girls' schools ?

20. (*a*) What, in your opinion, should be the place assigned to moral and/or religious instruction in secondary schools and how would you organize such instruction ?

(*b*) What other alternate ways whould you suggest for the promotion of character building and training in leadership ?

(*c*) How far is discipline maintained in schools in your area ? Is there any growing tendency towards indiscipline ? If so, what do you attribute this to ? What measures whould you suggest for ensuring better discipline in schools and in the life of the student ?

21. Is there and should there be provision for (i) simple manual labour and socially useful work, (ii) recreational facilities and (iii) physical education on a compulsory basis ? If so, give details.

22. Should there be compulsory social service by secondary school pupils at any stage ? If so, describe the nature and duration of such service ?

23. Is it possible to introduce some sort of student-government in schools ? If so, what would be the nature of such provision ? Give details.

24 Should there be something like the English VI form for gifted children who have completed the High School course before the normal age of entry to the University ? If so, what should be the specific function of such a sixth form ?

V. METHODS OF INSTRUCTION

1. (*a*) What are the methods of teaching usually adopted in secondary schools ?

(*b*) Do you suggest any changes in these methods ? If so, give concrete suggestions.

(*c*) How can methods of teaching be reformed so as to develop intellectual initiative or self-activity ?

2. Is the system of dictating notes used in your schools ? How far should this be allowed ?

3. Do you think it desirable that home-work—should be prescribed in schools? If so, how much of home-work (both written-work and study) do you suggest for each class per week?

4. (a) What method of correction of such written home-work do you have?

(b) What check do you have to see that home-work is properly corrected?

5. How much of practical work in school do you provide for different subjects? Give details for each subject.

6. What are the library facilities available in your school for pupils and teachers? How far are they utilised?

7. (a) What system would you suggest for improving library service in schools?

(b) How can we make provision for supervised study and library work in schools?

VI. EXAMINATION, EVALUATION AND GUIDANCE

1. What is the scheme of examinations at School Final stage? What is the method of appointment of examiners, of setting question papers of control over printing and distribution of papers and of supervision at Examination centres?

2. How many public examinations should there be during the secondary stage and what should be the nature of such examinations?

3. Should schools have an annual examination? Or should there be periodical (weekly and terminal) examinations only or both?

4. How would you ensure the full and proper evaluation of progress of a student in school?

5. Should there be a public examination at the end of Basic stage at the age of 14 (analogous to the Junior High School or Middle examination)?

6. (a) What are the advantages and disadvantages of the essay type of examination?

(b) Is it possible to introduce the new type objective tests in the secondary school?

(c) Would you suggest any alternate type of test to those usually adopted at present?

7. (a) What should be the system of maintaining individual records of pupils?

(b) What would be the weightage given to those records?

8. What should be the basis of annual promotion from one class to another?

9. Should there be any centralised type of either State or inter-State examination for the secondary schools, of the type of the Cambridge Examinations in addition to the other examining authorities?

10. How can we introduce educational and vocational guidance for secondary school pupils?

VII. TEACHERS AND CONDITIONS OF SERVICE

1. What are the qualification prescribed for staff in schools (Primary section, Middle section and High School classes)? The qualifications for Specialist Teachers like Drawing Master, Drill Master, Handicraft Intructor etc, may be mentioned.

2. What are the scales of pay of the different categories of teachers in (i) Government service, (ii) Local Board service, and (iii) other service?

3. What are the leave rules for the categories (i), (ii) or (iii)?

4. (a) Are there any rules regarding tuition; if so, what are they?

(b) Is there any limit for the number of tuitions that could be undertaken by a teacher?

5. Is there any scheme of Provident Fund, Pension or Gratuity or a combined system of provident fund and pension for each category of teachers ?

6. Is there provision for employment of part-time teachers and if so what are their conditions of service ?

7. Do you consider that provision should be made for the employment of woman as part-time teachers ?

8. What is the role of women teachers at Primary School stage, Middle School stage and Secondary stage ?

9. What would be the minimum academic qualifications for teachers in junior and senior secondary schools ? Should it be different from the qualifications for teachers in junior secondary school ? (Junior schools teaching up to third form, senior teaching up to sixth form).

10. (*a*) What steps should be taken to attract and retain to the teaching profession persons with proper academic qualification and love of the profession ?

(*b*) What step should be taken to improve the prospect and status of teachers ?

11. What, in your view, are the defects of the existing system of training of teachers of secondary schools ?

12. What changes would you propose in the system ?

13. What are the facilities for the training of teachers, men and women ?

14. What, in your opinion, should be the salary scale for teachers in secondary schools ?

15. What, in your opinion, should be the maximum hours of work for secondary school teachers ?

16. What should be the maximum strength for a class which one teacher can teach effectively ?

VIII. FINANCES

1. Are you satisfied that secondary schools ln the country have adequate financial resources functioning properly ?

2. Are you satisfied with the present manner in which grants are given to the secondary schools by the Central and the State Governments ?

3. Would you suggest any method by which such grants may be properly regulated and Government may be in a position to see that such grants are properly utilised ?

4. What should be the ratio of expenditure to be met out of (i) State funds ; (ii) Fees ; and (iii) Other sources ?

5. (*a*) Can secondary education be free ?

(*b*) If not, what steps should be taken to ensure that meritorious students are not denied access to secondary education only on account of poverty ?

6. (*a*) What are the rates of fees (tuition fees and others) in secondary schools in your area ?

(*b*) Do you consider the rates of fees for tuition and examinations charged at present by secondary schools reasonable ?

(*c*) Is there room for further enchancement of the tuition fees, if adequate safeguards are made in the way of half-fee, quarter-fee, or full-fee remissions for those who cannot afford to pay on a graded salary basis ? If so, how would you snggest the rate of gradation that may be adopted ?

7. To what extent are secondary schools maintained in your State by the Provincial Government, Local Bodies and Trusts, Missionary agencies and other private bodies ?

8. What methods would you suggest for finding out additional funds required for improving the existing system of secondary education ?

APPENDIX III

Tour Programme of The Secondary Education Commission

Thursday, 9th October, 1952	...	dep.	Delhi
Friday, 10th ,,	...	arr.	Simla.
Saturday, 11th ,,	...	dep.	Simla.
Sunday, 12th ,,	...	arr.	Delhi.
Monday, 13th ,,	...	dep.	Delhi.
,, ,, ,,	...	arr.	Srinagar
14th to 18th ,,	...	Halt	at SRINAGAR.
Sunday, 19th ,,	...	dep.	Srinagar.
,, ,, ,,	...	arr.	Jammu.
Monday, 20th ,,	...	dep.	Jammu.
,, ,, ,,	...	arr.	Amritsar.
Tuesday, 21th ,,	...	dep.	Amritsar.
,, ,, ,,	...	arr	Jullundur City.
22nd & 25th ,,	...	Halt.	at JULLUNDUR.
Friday, 24th ,,	...	dep.	Jullundur City.
,, ,, ,,	...	arr.	Ludhiana.
,, ,, ,,	...	Trip	to Moga by road and back Ludhiana.
,, ,, ,,	...	dep.	Ludhiana.
Saturday, 25th ,,	...	arr.	Delhi.
26th & 27th ,,	...	Halt	at. DELHI.
Tuesday, 28th ,,	...	dep.	Delhi.
,, ,, ,,	...	arr.	Lucknow.
29th & 30th ,,	...	Halt	at LUCKNOW.
Thursday, 30th ,,	...	dep.	Lucknow.
Friday, 31st ,,	...	arr.	Allahabad.
31st Oct. & 1st November 1952	...	Halt	at ALLAHABAD.
Sunday, 2nd ,,	...	dep.	Allahabad.
,, ,, ,,	...	arr.	Banaras.
3rd ,,	...	Halt.	at BANARAS.
Tuesday, 4th ,,	...	dep.	Banaras.
,, ,, ,,	...	arr.	Patna.
5th to 10th ,,	...	Halt	at PATNA.
Tuesday, 11th ,,	...	dep.	Patna
,, ,, ,,	...	arr.	Shillong.
12th to 13th ,,	...	Halt.	at SHILLONG.
Friday, 14th ,,	...	dep.	Shillong.
,, ,, ,,	...	arr.	Gauhati.
15th to 17th ,,	...	Halt.	at GAUHATI.
Tuesday, 18th ,,	...	dep.	Gauhati.
,, ,, ,,	...	arr.	Dibrugarh.
Wednesday, 19th ,,	...	Halt	at DIBRUGARH.
Thursday, 20th ,,	...	dep.	Dibrugarh.
,, ,, ,,	...	arr.	Calcutta.
Friday, 21st ,,	...	Halt	at CALCUTTA.
Saturday, 22nd ,,	...	dep.	Calcutta.
,, ,, ,,	...	arr.	Shantiniketen.
Sunday, 23rd ,,	...	Halt	at SHANTINIKETAN.
Monday, 24th ,,	...	dep.	Shantiniketan.
,, ,, ,,	...	arr.	Calcutta.
25th & 26th ,,	...	Halt	at CALCUTTA.
Thursday, 27th ,,	...	dep.	Calcutta.
,, ,, ,,	...	arr.	Cuttack.
28th & 29th ,,	...	Halt	at CUTTACK.
Sunday, 30th ,,	...	dep.	Cuttack.
Monday, 1st December, 1952	...	arr.	Delhi.
Thursday, 1st January, 1953	...	arr.	Madras.
2nd & 3rd ,,	...	Halt	at MADRAS.
Sunday 4th ,,	...	dep.	Madras.
,, ,, ,,	...	arr.	Vishakhapatnam.
Monday, ,, ,,	...	Halt	at VISHAKHAPATNAM.
Tuesday, ,, ,,	...	dep.	Vishakhapatnam.

Tuesday,	6th January, 1953		...	arr.	Madras
7th, 8th, &	9th	,,	..	Halt	at MADRAS
Friday,	9th	,,	...	dep.	Madras.
Saturday,	10th	,,	...	arr.	Madura.
Sunday,	11th	,,	...	dep.	Madura.
Monday,	12th	,,	...	arr.	Trivandrum.
13th &	14th	,,	...	Halt	at TRIVANDRUM
Thursday,	15th	,,	...	Dep.	Trivandrum.
,,	,,	,,	...	arr.	Ernakulam.
Friday,	16th	,,	..	dep.	Ernakulam
,,	,,	,,	...	arr.	Coimbatore.
Saturday,	17th	,,	...	Halt	at COIMBATORE
Sunday,	18th	,,	...	dep.	Coimbatore.
,,	,,	,,	...	arr.	Lovedale.
Monday	19th	,,	...	dep.	Lovedale.
,,	,,	,,	..	arr.	Mysore.
20th &	21st	,,	...	Halt	at MYSORE.
Thursday,	22nd	,,	...	dep.	Mysore.
,,	,,	,,	...	arr.	Bangalore.
23rd to	25th	,,	...	Halt	at BANGALORE.
Monday,	26th	,,	...	dep.	Bangalore.
,,	,,	,,	...	arr.	Hyderabad.
27th &	28th	,,	...	Halt	at HYDERABAD.
Thursday,	29th	,,	...	dep.	Hyderabad.
,,	,,	,,	...	arr.	Nagpur.
Friday	30th	,,	...	Halt	at NAGPUR.
Saturday,	31st	,,	...	dep.	Nagpur.
,,	,,	,,	...	arr.	Jubbalpur.
Sunday,	1st February 1953		...	dep.	Jubbalpur.
,,	,,	,,	...	arr.	Nagpur.
Monday,	2nd	,,	...	Visit	to Amraoti.
Tuesday,	3rd	,,	...	Visit	to Wardha.
,,	,,	,,	...	dep.	Nagpur.
,,	,,	,,	...	arr.	Bombay,
4th, 5th	6th	,,	...	Halt	at BOMBAY.
Saturday,	7th	,,	...	dep.	Bombay.
,,	,,	,,	...	arr.	Poona.
Sunday,	8th	,,	...	Halt	at POONA.
Monday,	9th	,,	...	dep.	Poona.
,,	,,	,,	...	arr.	Bombay.
Tuesday,	10th	,,	...	dep.	Bombay.
,,	,,	,,	...	arr.	Rajkot.
,,	,,	,,	...	dep.	Rajkot.
Wednesday	11th	,,	...	arr.	Ahmedabad.
Thursday,	12th	,,	...	dep.	Ahmedabad.
,,	,,	,,	...	arr	Baroda.
Friday,	13th	,,	...	dep.	Baroda.
Saturday,	14th	,,	...	arr.	Indore
Sunday,	15th	,,	...	Halt	at INDORE.
Monday,	16th	,,	...	dep.	Indore.
Tuesday,	17th	,,	...	arr.	Udaipur,
17th &	18th	,,	...	Halt	at UDAIPUR.
Wednesday	18th	,,	...	dep.	Udaipur
Thursday,	19th	,,	...	arr	Jaipur.
,,	19th	,,	...	Halt	at JAIPUR.
Friday,	20th	,,	...	dep.	Jaipur.
Saturday,	21st	,,	...	arr	Delhi
Sunday,	22nd	,,	...	Halt	at DELHI.
Monday,	23rd	,,	...	Visit	to Aligarh
24th &	25th	,,	...	Halt	at DELHI.
Thursday,	26th	,,	...	dep.	Delhi.
,,	,,	,,	...	arr.	Gwalior
Friday,	27th	,,	...	Halt.	at GWALIOR.
Saturday,	28th	,,	...	dep.	Gwalior.
,,	,,	,,	...	arr.	Delhi.

APPENDIX IV

LIST OF BODIES AND INDIVIDUALS WHO GAVE ORAL EVIDENCE OR SUBMITTED MEMORANDA OR OTHERWISE ASSISTED THE COMMISSION

Central Ministry of Education.
Inter-University Board of India.
All-India Federation of Educational Associations.

AJMER

Sister Catherine, Principal, Sophia College.
Shri B.C. Chatterji, District Inspector of Schools.
,, K.N. Dutt, Director of Education.
,, J.S. Gupta, Manager, Savitri Girls' College.
,, P.C, Joshi, Headmaster, Government High School.
Shrimati V.M. Koula, Inspectress of Schools.
Shri P.C. Lal, Ex-Principal, Teachers' Training College.
,, M.C. Mahi, Headmaster, Government High School for Sindhis.
,, T.N. Vyas, Principal, Mayo College.

ASSAM

Shri Saifuddin Ahmed, Retired Headmaster, Dibrugarh.
,, Z. Ahmed, Dibrugarh.
,, Kiramat Ali, Dibrugarh.
,, K.R. Baisya, Secretary, Assam Text-Book Committee.
,, S.C. Barbofuah, Ex-Chairman, School Board, Sibsagar.
,, H.P. Barooah, Retired Chief Engineer, Shillong.
,, H.P. Barooah, Dibrugarh.
Kumari Margaret Barr, Shillong.
Shri B.K. Barua, Secretary, University Classes, Gauhati University.
,, Hem Barua, Principal, B. Barooah College, Gauhati.
,, Kamakshyaram Barua, Gauhati.
,, L.S. Barua, Dibrugarh.
,, M.N. Barua, Dibrugarh.
,, R.C. Baraua, Headmaster, Dibrugarh High School.
,, R.N. Barua, Dibrugarh.
,, S. Barua, Dibrugarh.
,, A.C. Bezbarua, Dibrugarh.
,, G.S. Bhattacharya, M.L.A., Gauhati.
,, H.C. Bhuyan, Principal, Cotton College, Gauhati.
,, S.K. Bhuyan, M.P., Gauhati.
,, R.K. Bose, Secretary, Dhubri College, Dhubri.
Shrimati D. Borat, Gauhati.
Shrimati Usha Borthakur,, M.L.A., Gauhati.
Shri B.P. Chaliha, President, Assam Pradesh Congress Committee, Gauhati.
,, J.P. Chalia, Chairman, Pulbic Service Commission, Shillong.
Shrimati Chaliha, Headmistress, Girls' High, School Dibrugarh.
Shrimati J. Chanda, Education Department, Shillong.
Shri S. N. Chakravarty, Cotton School, Gauhati.
,, M.H. Chaudhury, M.L.A., Gauhati.
,, S. Dowers, Dibrugarh.
Rani Munjula Devi, Shillong.
Shri G. Das. M.P., Gauhati.
,, Omeo Kumar Dat, Minister of Education, Shillong.
,, S.C. Dutta Roy, Headmaster, A.O. Co., High School, Digboi.
,, K.N. Dutt, Deputy Director, Historical and Antiquarian Studies, Gauhati.
,, S. Gohain, Officer for Basic Education, Gauhati.
,, D. Goswami, Director of Public Instruction, Shillong.
,, Hareshwar Goswami, M.L.A., Gauhati.
,, G.C. Goswami, Superintendent, Normal School, Jorhat.
,, N.B. Goswami, Headmaster, High School, Karimganj.
,, P. Goswami, Dibrugarh.
,, U.K. Goswami, Ex-Director of Public Instruction, Shillong.

Shri D. C. Dass Gupta, Gauhati University, Gauhati.
,, K. K. Handiqui, Vice-Chancellor, Gauhati University.
,, H. Kanoi, Dibrugarh.
,, B. C. Kar, Gauhati University, Gauhati.
,, A. N. Kidwai, I.C.S., Secretary to the Government of Assam, Shillong.
Shrimati B Khongmen, Shillong
Shri N. C. Kalita, Assam Rashtrabhasha Prachar Samity, Gauhati.
Shrimati B Lais, Inspectress of Schools, Shillong.
Shri I. Majid, I.C.S., Secretary, Education Department, Shillong.
,, Mayangnockcha, Headmaster, High School, Mokokchung, Naga Hills.
,, E. Momin, Shillong.
,, R. N. Nabis, Assam Rashtrabhasha Prachar Samity, Gauhati.
,, S. Pall, Supervising Headmaster, A.O. Co., Schools, Digboi.
,, C. K Phukan, M. L. A., Gauhati.
,, N. Phukan, Dibrugarh.
Shrimati A. Rahman, Shillong.
Shri A. Razzaque, Dibrugarh.
Brother Roe, St. Edmund's College , Shillong,
Shri S. C. Rajkhowa, Inspector of Schools, Jorhat.
,, Anil Chandra Roy, Principal, Darrang College, Darrang.
,, U. Owen, Rowie, Shillong.
,, B. C. Sen Gupta, Principal, Dhubri College, Dhubri.
,, Deveshwar Sharma, Dibrugarh.
,, Hareshwar Sharma, Basic Training Centre, Udarband.
,, S. C. Sikdar, Headmaster, Jail Road High Schools, Shillong.
,, P. C. Sharma, Advocate, Shillong.
,, R. K. Sharma, Headmaster, Bezbarua High School, Sibsagar.
,, Ratnakar Sharma, Dibrugarh.
,, L. Sharma Baruah, Retired Superintendent, Normal School, Jorhat.
,, G. C. Sharma Borooah, Inspector of School, Gauhati.
,, Shearman, Welfare Officer, A.O.Co., Digboi.
,, Sopranga, Parliamentary Secretary, Shillong.
,, Mohammed Sultan, Deputy Commissioner, Dibrugarh.
,, K. P. Tripathi, M. P., Tezpur.

Chairmen of School Boards.

Director of Agriculture, Shillong.

Assistant Director of Agriculture, Shillong.

Deputy Director of Cottage Industries, Shillong.

Deputy Director of Sericulture, Shillong.

Department of Public Instruction Officers.

Headmaster, Cotton Collegiate Schools, Gauhati.
Government High School, Dibrugarh.
Girls' High School, Dibrugarh.

Headmistress, Pinemount School, Shillong.
Loreto Convent.

Principal, College of Agriculture, Jorhat.
Industrial Training School, Jorhat.
Basic Training Centre, Titabar.
St. Anthony's College, Shillong.

Representatives of
Aided High Schools' Association, Dibrugarh.
Aided College Teachers' Association.
Inspecting Officers' Association.
Middle English School Teachers' Association.

Superintendent of Normal School, Jorhat.

BHOPAL

Shri P. C. Malhotra, Principal, Hamidia College, Bhopal.
,, D. P. Verma, Senior Inspector of Schools, Bhopal.

BIHAR

Shri S. A. Ali, Guzri, Patna City.
,, N. Ahmed, Member, Basic Education Board, Patna.
,, S M. Ahmed, Deputy Director of education, Patna.
,, Bindhyeswar Mishra, Headmaster, High School, Sultanganj.
,, K N. Bahl, Vice-Chancellor, Patna University, Patna.
,, Uma Shankar Bahadur, New Kadamkuan Patna.
Kumari B. Dey, Secretary, Balika Vidyalaya, Patna.
Kumari N. De, Bihar Council of Women, Patna.
Shri S R. Das, Youth's Welfare Association, Patna.
H. E. Shri R. R. Diwakar, Governor, of Bihar, Patna.
Shri D. M. Dutta, Philosophy Department, Patna College, Patna.
,, A. Hussain. Syndic, Bihar University, Patna.
,, A. N. Jha, Headmaster, Zilla School, Purnea.
,, B. N. Jha, Member, Board of Secondary Education, Patna.
,, Jagdhar Jha, Principal, Pusa Basic Training School, Darbhanga.
,, Lakshman Jha, C. M. College, Darbhanga.
,, A. A. Kazmi, Principal, Patna Training College, Patna.
,, Dharmaraj Kishore, Headmaster, High School, Tilothep, Shahabad.
,, Rai Brijraj Krishna, M. L. C., Patna
,, S. S. Lal, Retired Superintendent of Basic & Social Education, Patna.
,, A. Majid, Assistant Director of Education, (Islamic), Patna.
,, C. Majumdar, Headmaster, Gaya Zilla School.
,, J. C. Mathur, I. C. S., Education Secretary, Patna.
Shrimati L. Menon, M. P., Patna.
Shri J. Misra, Principal, T. N. J. College, Bhagalpur.
Shri Purna Chandra Mitra, M. P., Ranchi.
Kumari S. Mitra, Bihar Council of Women, Patna.
Shri J. Nath, Gandhi Smarak Achangal Vidyalaya, Khiri, Arrah.
Shri Chanderashekhar Pandey, Chapra.
Shrimati N. Patnaik, Dy Directress of Girls' Education, Patna.
Shri Kshetra Mohan Poddar, Headmaster, Ram Mohan Roy Seminary, Patna
,, Bhagwan Prashad, Assistant Director of Education (Planning), Patna
,, R. K. Prasad, Syndic, Patna University, Patna.
,, Jagdamba Saran Roy, Principal, Secondary Training School, Bhagalpur
,, Rash Bihari Roy, Headmaster, Ranchi Zilla School, Ranchi.
Shrimati Rubens, Bihar Council of Women, Patna.
Shri Premtosh Rudra, Headmaster, Zilla School, Hazaribagh.
Shri Baldeo Sahay, Ex-Advocate-General, Patna.
Rev. C. P. Saldhana, Rector, Kurist Raja High School, Bettiah.
Shri Dharmendra Shastri, Assistant Director for Social Education, Patna.
,, A. P. Singh, Principal Handika Basic Training School, Dumka.
,, Banarsi Parsad Singh, M. P., Chairman, District Board, Monghyr.
,, Dwarika Singh, Principal, Sarvodaya Mahavidyalaya.
The Bihar Community College, Narsinghnagar, Turki.
,, D. M. Singh, Jharia Academy, Jharia.
,, K. Singh, Headmaster, Daya Nand Vidyalaya, Mithapur, Patna.
,, Nageshwar Singh, President Bihar Secondary Teachers' Association Patna.
,, Rajandhari Singh, Chairman, Public Service Commission, Patna.
,, Rambinode Singh, M.L.A., Patna
,, Bakshi A.P. Sinha, Inspector of Schools, Patna Division, Patna
,, C. P. Sinha, Superintendent, Reformatory School, Hazaribagh.
,, G. N. Sinha, Retired Director of Public Instruction, Bihar.
,, K. P. Sinha, Director of Public Instruction, Bihar.
,, R. C. Sinha, Headmaster, Post-Basic School, Kothantapaton, Darbhanga.
,, R. P. Sinha, Principal, Basic Training School, Sukasan, Manhara.
Kumari Uma Sinha, Women's Training College, Patna.
Shri H. N. Thakur, Superintendent, Basic & Social Education, Bhagulpur.
Kumari I. H. Tolley, Principal, Bishop Westcott School for Girls, Namkum.
Rev. V. Tucker, Headmaster & Inspector of Cotholic Schools, Ranchi.
Shri Amal Upadhyay, Headmaster, M.V. Institution Purulia.
,, R. S. Upadhyay, Deputy Director of Education (Basic & Primary), Bihar, Patna.
,, V. Upadhyay, Assistant Director of Education (Sanskrit Education), Patna.

Acharya Badrinath Verma, Minister for Education, Patna.
Shri S. S. Verma, Secretary, Text-Book Committee, Patna.
Director of Agriculture, Patna.
Department of Public Instruction Officers.
Editor, 'Indian Nation', Patna.
Headmaster, Patna High School.
Multi-lateral Post-Basic School, Amari.
Zilla School, Bhagalpur.
Zilla School, Chaibara.
Zilla School, Daltonganj.
Zilla School, Motihari.
Post-Basic School, Shrinagar, Purnea.

and of a number of Basic, Government and non-Government High Schools.

Inspectors of Schools, Bhagalpur.
Chotanagpur.
Patna.
Tirhoot.

Principals of
Basic Training School, Chiri Ranchi.
Basic Training School, Gaya.
Basic Training School, Pindrajore, Manbhum.
St. Joseph's Convent High School, Patna.
Industrial Training Centre, Dighaghat, Patna.
B. N. R. Training College, Bankipur Girls' High School.
Secretary, Mahatma Gandhi Vidyalaya, Chakradharapur.
Bihar Publishers' Association.
District Secondary School Teachers' Association, Jharia.
Staff of the Government Training College, Patna.
Tisco Teachers' Association, Jamshedpur.

BILASPUR (Simla Hills)

Shri Prem Singh, Education Officer, Bilaspur State.

BOMBAY

Shri N. L. Ahmed, Principal Elphinstone College, Bombay.
,, S. Srinivasa Aiyar, Principal, D. S. High School, Sion, Bombay.
Shrimati Violet Alva, Bombay.
Shri B. P. Aradhya, Haliyal, North Kanara
,, G. K. Athalye, Inspector of Visual Education, Bombay State.
,, R. S. Bangera, Headmaster, Basel Mission High School, Dharwar.
Kumari S. Bapat, Inspectress of Schools, Bombay
Shri B. V. Bapat, Principal, Tilak College of Education, Poona.
N. S. Bendre, Baroda.
Kumari M. Benjamin, Headmistress, Alexandra Girls' Institute, Bombay,
Shri M. C. Benson, I. P. Mission High School, Surat.
,, M. Bhavnani, Chief Producer, Films Division, Government of India, Bombay.
,, C. Bhanot, Educational Inspector with other officers.
Acharya S. R. Bhise, Principal Hakumji High School, Bordi.
Shri C. P. Budhram, Educational Inspector, Bombay.
,, G. L. Chandrakar, Ram Mohan English School, Bombay.
,, F. S. Chothia, Vocational Guidance Officer, Government of Bombay.
,, C. A. Christie, Principal, Robert Money High School, Bombay
,, V. K. Chowdhari, Educational Inspector, Poona.
Shrimati Zarina Currimbhoy, Bombay.
Shri J. R. Dani, Headmaster, J. R. City High School, Dulia.
,, S. A. Dave, Ahmedabad, West Khandesh.
,, W. M. Dabadghao, Superintendent, N. M. V. High School, Poona.
,, D. M. Desai, Chikhli Surat.
,, L. R. Desai, Principal, S. T. College, Ahmedabad.
,, J. R. Desai, Principal, C. N. Vidyalaya, Ahmedabad.
,, B. M. Desai, Bardoli, Gujarat.
,, Morarjibhai Desai, Chief Minister, Bombay State.
,, Dinkar Rao Desai, Minister for Education.
,, P. A. Desai, Principal, R. C Technical Institute, Ahmedabad.
,, S. S. Deshmukh, R. V. Technical High School, Bombay.
,, G. S. Deshpande, S. N. D. Thackersy Kanyashala, Poona.

Shri D. V. Deshpanday, N. & S. Secondary Teachers' Association, Bombay.
,, C M. Deshpanday, Headmaster, Karnatak Rural Education Society's High School, Ainapur, Belgaum.
,, A. L Dias, I. C. S., Education Secretary, Bombay.
,, A. V. Divetia, Vice-Chancellor, Gujrat University.
,, Donnelly, Principal, St. Stanislan's High School, Bombay.
,, R. G. Dubey, Bijapur.
,, M. V. Donde, Headmaster, R. M. Bhatt High School, Bombay.
,, Dr. R. Gadgil, Gokhala Institute of Politics, Poona.
,, G. V. Gadgill, Headmaster, Seth Dharamassy G. Thackersey High School, Bombay.
,, M. M. Gandhi, M. P., Kalols Panchmahals, Bombay.
,, M. G. Ghare, Member, S. S. Headmasters' Association, Poona.
,, V. D. Ghate, M. L. A., Poona.
,, L. M. Ghoda, National Secondary School, Ahmedabad.
,, B. V. Gharpure, Curator, Lord Reay Maharashtra Industrial Museum, Poona.
,, S. V. Ghurye. H. G. S. Vidalaya, Bombay.
,, K. R. Gunjikar, Retd. Principal, Elphisntone College, Bombay.
,, Shaikh Hassan, Hony. Secretary, Bombay Headmaster' Association.
,, R. V. Hembraja, Secretary, Karnataka Headmasters' Association, Bijapur.
,, L. A. V. Iyer Headmaster, New High School, Dohad.
,, M. R. Jayakar, Vice-Chancellor, University of Poona.
,, H. S Jogelkar, Principal, Gokhale Education Society's High School, Girgaon.
,, V. K. Jog, Wadia College, Poona.
,, Uma Shankar Joshi, Wadia College. Poona.
,, V. H. Kadival, General Secretary, Karnatak Secondary Teachers' Association, Bagalkot.
,, R. C. Kapadi, Secretary, Ahmedabad Headmasters' Association.
Kumari C S. Karnataki, Inspectress, Girls' Schools, Poona.
Shri B. D. Karne, Secretary, Hengne Stree-Shikan Samastha, Poona.
,, A. R. Kelkar, Poona.
,, G. A. Kewalramani, Headmaster, Premier High School, Bombay.
Kumari K. Khandvala, Education Officer, Bombay Municipality.
Shri G. S. Khair, Maharashtra Vidyalaya, Poona.
,, V. Y. Kolhatkar, Baroda University.
,, V. R. Koppal, Headmaster, R. L. S. High School, Dharwar.
Rev R. V. Koppekar, Principal, New English School, Hubli.
Shri G. S. Krishnayya, Principal, Teachers' College, Belgaum.
,, B. N. Kulkarni, Hony. Secretary, S. S. Headmasters' Association, Poona.
,, G. S Kulkarni, Basel Mission, High School, Dharwar.
,, K. G. Kulkarni, Bombay
,, C. G Kulkarni, Hony. Secretary, Association of Managements of Poona Schools.
,, P. M. Lad, I. C. S., Secretary, Legal Department, Bombay.
,, V. G. Limaye, Dy. Chairman, Legislative Council, Bombay.
,, B. K. Marzaban, Principal, Bhatra New High School, Bombay.
,, K. R. Masani, Chairman, Executive Committee, Indian Council of Mental Hygiene.
,, R. V. Matkari, Bombay.
,, A. B. Magdum, Maharata Sayaje Rao Vidyalaya, Satara
Shrimati Lina Mangaldas, Shreyas, Ahmedabad.
Shri M. A. Mehta, Bombay.
,, R. M. Mehta, New India Assurance Co., Ltd., Bombay.
,, H. P. Mehta, Director Vocational Guidance Bureau, Parsi Panchyat Funds & Properties, Bombay.
,, T. K. N. Menon, Baroda University.
,, H. Y. Mishal, Headmaster, Partap High School, Amalner.
,, Ladharam Mohandass, Sindhi Panchayat, Baroda.
,, Chamraklalji Modi, President, Social Education Committee, Bombay.
,, H. K. Mokashi, Chairman, Secondary Schools' Headmasters' Association Nasik.
,, R. M. Munshi, M. L. C., Khedut Office, Ahmedabad.

Shri S. K. Muranjn, Principal, Sydenham College, Bombay.
" N. G. Nadgir, Headmaster, H. B. High School, Kundgol.
" D. J. Nagarkar, President, Poona Adyapak Sangh, Poona.
Kumari P. Nagarwalla, Principal, J. B. Vaccha Girls High School, Bombay.
Shri J. P. Naik, Indian Institute of Education, Bombay.
" S. C. Nandimath, Registrar, Poona University.
" P. R. Nayak, Municipal Commissioner, Bombay Municipality.
" S. Nurullah, Joint Director of Education and Chairman, S.S.C. Examination Board, Poona.
" P. K. Oak, N.M.V. High School, Poona.
" S. K. Oak, N.M.V. High School, Poona.
Shrimati S. S. Oomarigar, Hony. Secretary, Bombay Presidency Women's Council Bombay.
Shri N. V. Pai, Headmaster, Chiketsal Samaoha High School, Bombay.
Kumari Subhadra Pandit, Principal, Arya Kanya Mahavidyalaya, Baroda.
Kumari Saraswati Pandit, Baroda.
Shrimati Subhadrabai Pagar, Principal, S.N.D.P. Mahila Vidyalaya, Baroda.
Shri K. G. Pandit, M.L.C. Principal, Willingdon College, Sangli.
Shri M. V. Pandit, Jt. Principal, Sanjeewan Vidyalya, Panchgani.
Kumari S. Panandikar, Principal, Secondary Training College, Bombay.
Shri R. P. Paranjpe, Poona.
" S. D. Parasharami, Headmaster, Northcote Technical High School, Sholapur.
" G. S. Paramisivayya, Principal, Lingraj College, Belgaum.
" R. P. V. Parulekar, Director, Indian Institute of Education Bombay.
" C. S. Patel, Baroda University.
" R. K. Patel, Headmaster, V. N. High School, Dharmaj, Gujarat.
" I. B. Patel, Anand, Baroda.
" S. M. Patki, Headmaster Middle School, Mukhed, Nanded.
" S. S. Patke, Co-Editor, "Progress, of Education", Poona.
" C. N. Patwardhan, Ex-Director of Education, Bombay.
" R. B. Patwardhan, Poona.
" D. C. Pavate, Director of Education, Bombay.
" A. G. Pawar, Secretary, Board of Secondary Education, Poona.
" C. S. Pradhan, Bombay.
" K. Ramakrishna Rao, Headmaster, Rajah's High School, Vileshwar.
" M. A. Razzaq, Principal, Anjuman-i-Islam High School of Commerce. Bombay.
" G. D. Rege, Suburban N. S. Secondary Teachers' Association, Bombay.
Rev. A. Rehm, Principal, St. Vincent's High School, Poona.
Kumari Amy B. H. J. Rustomjee, Bombay.
Shri R. P. Sabnls, Vidya Mandir, Narayangaon, Poona.
" S. A. Sabnis, President, Secondary Teachers, Association.
" C. K. Sankholkar, Secretary, Bombay State Federation of Secondary Teachers' Association, Bombay.
" B. V. Sane, S. N. D. Thackersey Kanyashala, Poona.
" B. G. Spane, Principal, Narmada High School, Shukla Tirth.
Shrimati Manorama Sarabhai, Shreyas, Ahmedabad.
Shrimati Sarladevi Sarabhai, Shahibagh, Ahmedabad.
Shri Vikram Sarabhai, Head of the Physics Department, Ahmedabad.
" D. J. Sardeshpande, Headmaster, Rajpur High School, Rajpur.
Shrimati Indumati Chemanlal Seth, Dy. Minister of Education, Bombay.
Shri Amrit Lal Seth, Representative of Education, Society.
" M. G. Shah, Headmaster, Kapoorwala, High School of commerce, Anandi.
" G. G. Shah, Principal, Seth, M.R. High School, Kathlal.
" V. C. Shah, Secretary, All-Gujarat Students' Congress, Ahmedabad.
" N. N. Shah, President, Headmasters' Association, Baroda.
" K. T. Shah, Bombay.
" C. M. Sheth, Konkan Education Society, Mahad, Kolaba.
" C. V. Shriol, Headmaster, G.A. High School, Belgaum.
" D. C. Shukla, Principal, Navchetan High School, Ahmedabad.
" J. C. Shukla, Secretary, Secondary Teachers' Association, Ahmedabad.
" J. K. Shukla, Representative of the Association of Training Colleges in India, Baroda.
" N. D. Shukla, Principal, Tutorial High School, Ahmedabad.
" D. U. Shukla, Sarangpur, Ahmedabad.

Rev. Fr. Solagram, Principal, St. Xavier's High School, Bombay.
Shri A. Shalekar, President, State Federation of Headmasters' Association. Bombay.
,, B. Subarao, Baroda University, Baroda.
,, C. J. Sutaria, M.L.A., Baroda.
,, N. R. M. Swamy, M.P., Ranipet.
,, D. N. Takle, Industrial High School, Alibag, Kolaba.
,, Thakorelal S. Thakore, President, the Bombay State Federation of Secondary Teachers' Association, Ahmedabad.
,, R. M. Trivedi, Principal, New Education High School, Ahmedabad.
,, M. P. Vaidya, Gurkul High School, Ghatkopar.
,, J. A. Vakil, Educational Inspector, Ahmedabad.
,, K. S. Vakil, Bharatiya Vidya Bhawan, Bombay.
,, P. N Virkar, President, S. S. Headmasters' Association, Poona.
,, D. G. Vyas, Bombay.
,, S. M. Wadia, Baroda University, Baroda.
,, A. R. Wadia, Ex-Pro-Vice-Chancellor, M.S. University, Baroda.
,, N. J. Wadia, Vice-Chancellor, Bombay University.
,, K. G. Warty, Headmaster, Tutorial High School and the Editor, "The School World" Belgaum.
,, B. B. Yodh, Bombay.

Officers of the Directorate of Education.

Headmasters of

Agriculture High School, Bijapur.
Anglo Urdu High School, Poona.
Elphinstone Technical High School, Bombay.
Government Agricultural High School, Bijapur.
Navasarai High School, Bijapur.
Rajah High School, Nileshwar, S.K.
Raja Ram High School, Kolhapur.
Sardars' High School, Belgaum.
New High School, Bombay.

Headmistress, A. K. Girls' High School, Dharwar.

Mayor, Ahmedabad Municipality.

Principals of

Cathedral and John Canon Boys' School, Bombay.
Commerce College, Ahmedabad.
Gujrat College, Ahmedabad.
L. D. Arts College, Ahmedabad.
Teachers, Training College, Kolhapur.
St. Columbia School, Bombay.
St. Xavier's School, Ahmedabad.
St. Xavier's High School, Bombay.

Registrars of

Bombay University.
S. N. D. T. Women's University, Bombay.
M. S. University, Baroda.
Gujarat University, Ahmedabad.

Representatives of

Bharat Scouts and Guides Association, Bombay.
Federation of Secondary Teachers' Association.
Education Society Ahmedabad.
Headmasters' Association, Ahmedabad.
Headmasters' Association, Bombay.
Headmasters' Association, Poona.
Headmasters' Association, Baroda.
Karnatak Secondary Teachers' Association.
Karnatak University, Bagalkote.
Municipal Corporation, Bombay.
Principals of Arts & Science Colleges, Bombay.
Secondary Teachers' Association, Ahmedabad.
Secondary Teachers' Association, Baroda.
Secondary Teachers' Association, Bombay.
M. S. University of Baroda.
University of Bombay.
S. N. D. T. Women's University.
Poona University.

Secretaries of

Ahmednagar Secondary Teachers' Association.
Bombay State Federation of Secondary Teachers' Association.
Headmasters' Association, Baroda.
Karnatak Headmasters' Association, Bijapur.
Maharashtra Secondary Teachers' Association.
Secondary Teachers' Association, Poona.

COORG

Shri B. S. Kushalapa, Speaker, Legislative Assembly, Mercara.
,, K. P. A. Pillai, Principal Teachers' College, Mercara.
,, Ganesh J. Rao, District Education Officer, Mercara.

CUTCH, (BHUJ)

Shri J. J. Nanavaty, Education Officer.

DELHI (including the Centre)

Acharya Shriman Narayan Agarwal, General Secretary, A.I.C.C., New Delhi.
Shri Frank Anthony, M.P., Chairman, All-India Anglo-Indian Association, New Delhi.
,, M. Anantasayanam Ayyangar, M.P., Deputy Speaker, House of the People, New Delhi.
,, A. E. T. Barrow, M. P., Secretary, Inter-State Board of Anglo-Indian Education, New Delhi.
,, K. D. Bhaksi, Central Institute of Education, Delhi.
,, R. K. Ehan, Ministry of Education, New Delhi.
,, S. S. Bhatnagar, Secretary, Ministry of Education, New Delhi.
,, J. K. Bhonsle, Deputy Minister for Rehabilitation, Government of India New Delhi.
,, G. D. Birla, New Delhi.
,, C. N. Chak, Deputy Educational Adviser, Ministry of Education, New Delhi.
,, Punjabrao S. Deshmukh, Minister for Agriculture, New Delhi.
,, S. N. Dhusiya M.P., New Delhi.
,, A. S. Grewal, Undjer-Secretary, Ministry of Defence, New Delhi.
,, W. J. Haggerty, Educational Consultant, Ministry of Education, New Delhi.
,, Ashfaque Husain, Deputy Secretary, Ministry of Education, New Delhi.
,, R. R. Jajware, M.P., New Delhi.
,, Humayun Kabir, Additional Secretary, Ministry of Education, New Delhi.

Rajkumari Amrit Kaur, Minister for Health, New Delhi.
Shri Jaganath Kaushal, M.P., New Delhi.
Shrimati Sucheta Kripalani, M.P., New Delhi.
Pandit H. N. Kunzru, M,P., New Delhi.
Shri V. N. Mahodaya, M.P., New Delhi.
Sardar Surjit Singh Majithia, Deputy Minister for Defence.
Shri K. D. Malaviya, M. P., Deputy Minister for Natural Resources, New Delhi.
,, S. P. Mukherji, M. P., New Delhi.
,, D. P. Nayyar, Planning Commission, New Delhi.
,, D. S. Nigam, Central Institute of Education, Delhi.
Shrimati Sita Paramanad, M,P., New Delhi.
Shri E. A. Pires, Principal Central Institute of Education, Delhi.
,, Veda Prakasha, Central Institute of Education, Delhi.
Shrimati K. Shiva Rao, All-India Women's Conference, New Delhi.
Shrimati Hannah Sen, All-India Women's Conference, New Delhi.
Shri S. N. Sen, Vice-Chancellor, Delhi University.
,, Lall Singh, M.P., New Delhi.
Lala Sri Ram, Delhi.
Shri K. Sundaram Sharma, Ministry of Education, New Delhi.
,, P. J. Soren, M.P , New Delhi.
,, K. G. Vaidyanathan, Bharat Scouts, National Headquarters, New Delhi.
Shrimati Virmani, All India Woman's Conference, New Delhi.

Shri K. Zachariah, Ministry of External Affairs, New Delhi.
University of Delhi.
Principals of Colleges in Delhi.
Registrar and Representatives of the University of Delhi.
Shri Saeed Ansari, Jamia Millia Islamia, Delhi.
Kumari E. M. Ashdown, Education (Planning) Officer, Diocese of Delhi, New Delhi.
Shri A. N. Banerji, Director of Education, Delhi.
,, Jyoti Bhan, Member, Managers' Association, Delhi.
,, R. L. Bhargava, Secretary, Delhi State Graduate Teachers' Association, Delhi.
,, B. Bhattacharya, Principal, Union Academy, New Delhi.
Chowdhury Brahm Prakash, Chief Minister, Delhi.
Shri A. Chakravarty, Principal, Raisina Bengali Higher Secondary School, New Delhi.
,, Harish Chandra, Principal, D. A. V. Higher Secondary School, New Delhi.
Kumari S. Dang, Principal, R. M. Arya High School for Girls, New Delhi.
Shri A. C. De, General Secretary, Association of Scientific Workers, New Delhi.
,, A. C. Deb, Principal, Cambridge School, Delhi.
,, Iswar Das, Principal, D. A. V. H. S. School, Delhi.
Kumari S. Deviditta, Principal, Queen Mary's School, Delhi.
Shri Din Dayal, Principal, M. B. Higher Secondary School, New Delhi.
,, Siya Ram Gupta, Government H. S. School, Delhi Cantt.
,, Ram Chandra Gupta, Delhi.
,, Bhagwant Kishore, Commercial H. S. School, Delhi.
,, Hardwari Lall, Birla H. S. School, New Delhi.
,, S. Lall, Harcourt Butler H. S. School, New Delhi.
,, Sham Lal, President, Delhi Municipality.
,, A. W. Menzes, St. Columba's High School, New Delhi.
Prof. M. Mujeeb, Vice-Chancellor, Jamia Millia Islamia, Delhi.
Shrimati Sachdeva, Headmistrees, Government High School, Delhi.
Shri R. N. Safaya, Camp College, New Delhi.
,, T. B. Sethi, Principal, L. N. Girdhari Lal H. S. School, Delhi.
,, G. N. Singh, Speaker, Delhi state Assembly.
,, Mohindra Singh, Commercial H. S. School, Delhi.
,, H. L Sharma, Craft Education Societies' Federation, Delhi.
,, Niranjan Singh, Principal, Camp College, New Delhi.
Representatives of the All-India Refugees Association.
,, Board of Higher Secondary Education.
,, School Managers' Association.
,, Association of Guardians of School Children.
,, State Teachers' Association.
,, State Headmasters' Association.
,, State Post-Graduate Teachers' Association.
,, State Graduate Teachers' Association.

HIMACHAL PRADESH

H. E. Major Himmat Singh, Lt, Governor, Simla.
Shri Y. D. Parmar, Chief Minister, Simla.
,, Jaiwant Ram, Speaker, Himachal Pradesh Assembly, Simla.
,, Sehgal, Deputy Director of Education, Simla.

HYDERABAD

Dr. A. Ali, Principal, College of Agriculture Hyderabad.
Shri Syed Ameer-ud-Din, Principal, Anwar-ul-Uloom High School, Nampally.
,, M. Murtza Ali, Sultanpur.
,, P. K Banerji, Principal, M. S. Higher Secondary School, Secunderabad.
,, S. Bhaguantam, Vice-Chancellor, Osmania University.
,, C. A. Chary, Assistant Headmaster, Viveka Vardhani High School, Hyderabad.
Kumari De Lima. Principal, Stanley Girls' High School, Hyderabad.
Shri S. Deuskar, Principal, School of Art, Hyderabad.

Prof. M. S. Doraiswami, Professor of English, Osmania University.
Rev. A. P. Fernandez, Rector, St. Mary's High School and President, Secunderabad Teachers' Association.
Shri Phulchand Gandhi, Minister for Education.
" L. R. Ganu, Advocate, Hyderabad.
" L. N. Gupta, Secretary, Education Department.
" Syed Hussian, Hyderabad
Brother John, Rector, all Saints' Institution High School, Hyderabad.
Shri K. A. Jonathan, General Secretary, Secunderabad Teachers' Association.
Shrimati Kalyani Kuttiammal, Principal, Keys' Girls High School, Hyderabad.

Shri M. S. Kotiswaran, Secretary, All-India Federation of Educational Association, Mahboob College, Hyderabad.

" J. Kempe, Hyderabad,
" Khande Rao Kulkarni, Headmaster, Kesar Memorial School, Hyderabad.

" C. V. D. Murthy, Special Officer, Department of Technical and Vocational Education, Hyderabad.

" P. Nagaswami, Secretary, Teachers' Union, Aitwar Chowk, Hyderabad.

" P. Narayanswami, V. V. High School. Hyderabad.
" Habibur Rehman, Secretary, Anjuman Taraqqi, Urdu.
" S. Ramamoorthy, V. V. High School, Hyderabad.
" V. P Mohan Raj, Principal, Osmania Technical College, Hyderabad.
" D. N Ramlal, Principal, City Collegiate High School.
" G. S Prakash Rao, Principal, Training College, Hyderabad.
" M. Hanumantha Rao, Retired Principal, Girls' High School, Narajanguda.

" Narsingh Rao, Dy. Director of Public Instruction, Western Circle.
" B Ramkrishna Rao, Chief Minister.
" Waman Rao, Dy. Director of Public Instruction, Eastern Circle.
" S. P. Reddy, Hyderabad.
" A. S. Row, Vice- President, Hyderabadi Aided & Private School Teachers', Guild.

" S. Sajidali, Ex-Dy. Director of Public Instruction, Hyderabad.
" K. Sheshachari. Secretary, Board of Secondary Education.
" D. D. Shendarkar, Dy. Director of Public Instruction, Hyderabad.
" S. D. Satwalekar, Principal, V. V. College, Hyderabad.
" T. Suryanarayana, Director of Public Instruction.
Shrimati Sushila Devi Vidyalankrita, Hyderabad.
Shri Husain Zahir, Director, Research Laboratories.
Director of Agriculture,
Director of Commerce.
Officers of the Department of Education.
Principals of
- Public School, Begumpet,
- Technical High School,
- High School Hyderabad,
- Girls' Vocational School.

Representatives of
- Aided School Teachers' Organisation.
- Chamber of Commerce.
- Government School Teachers' Organisation.

KASHMIR

Shri Sheikh Mohamed Abdullah, Prime Minister & Minister of Education.
" Abdul Ahad, Principal, Government Multi-purpose School, Srinagar.
Begum Zafar Ali, Chief Inspectress, Women's Education.
Shri Gulam Ahmed Ashahi, Registrar, Jammu & Kashmir University.
" Agha Ashraf, Inspector of Schools, Kashmir Circle.
" Gulam Mohamed Bhat, Director of Agricultre, Srinagar.
" Wazir Tara Chand, Director of Industries & Commerce.
Rev. Dr Edmund, Principal, C.M.S High School, Srinagar.
Shri Jai Lal Koul, Principal, S.P. College, Srinagar.
" Gopi Nath Koul, Kashmir Education Service, Srinagar.

Shri A. Kazimi, Director of Education.
,, B. K. Madan, Principal, Gandhi Memorial College, Srinagar.
,, Mahmood, Principal, Amar Singh College, Srinagar.
,, Gulam Ahmed Mukhtar, Principal, Teachers' Training College, Srinagar,
,, Wazier Janki Nath Vice-Chancellor, Jammu & Kashmir University and Chief Justice, Jammu Circle.
,, Mohinder Singh, Inspector of Schools, Jammu Circle.
,, L. D. Suri, Principal, Gandhi Memorial College, Jammu.
Shrimati Thussoo, Inspectress of Schools, Jammu Circle.
Principal, Ananta Nag College, Khahabal.

Rural High School, Matan.
Model Academy, Jammu.
Training School, Jammu.

Headmaster of
Multi-purpose High School, Shalimar.
Multi-purpose School, Jammu,
D. A. V. High School, Srinagar.
Islamia High School, Srinagar.
Khalsa High School, Srinagar.

Representatives of
The University of kashmir.
The Teachers' Organisation.

MADHYA BHARAT

Shri J J. Annkoolan, Deputy Director of Education, Indore
,, Rahul Barpute, Indore
,, D. N. Bhalla, Principal, Victoria College, Gwalior.
Shrimati Bryce, Indore.
Shri Bool Chand, Education Secretary, Gwalior.
,, S. N Chaturvedi, Director of Education, Indore.
,, A. M. Delaye, Principal, Madhav College, Ujjain.
,, H. R. Devekar Gwalior.
,, Narsingh Rao Dikshit, Minister of Education, Gwalior.
,, M C. Dube, Headmaster, Basic Training School, Manpur.
Shrimati Gandhe, All-India Women's Conference, Indore.
Shri A K Ghose, Principal Holkar College, Indore.
,, D. F. Jack, Principal, Daly College, Indore.
Shrimati Johari, Gwalior.
Shri B K. Joshi, Principal, Teachers' College, Jaora.
,, Virulkar Kaluram, Indore.
Shrimati Jyotsna Mehta, Indore.
Shri N. Padmanabhan, Gwalior.
,, R. P. Pradhan, Gwalior.
,, S. N. Prashad, Headmaster, High School, Chattrpur.
,, B. Sahai, Gwalior.
,, V. S. Sathe, Lashkar, Gwalior.
,, B. K. Shah, Gujerati Samaj, Indore.
,, K C. Shukla, Principal, Scindia School, Gwalior.
,, G. Singh, Principal, Rasulpura High School.
,, Kaluram Virulkar, Ex-Minister for Education, Indore.
,, V. S. Swami, Representative of the Madhya Bharat Teachers' Association, Mhow
,, N. A. Yagnik, Principal, P.B.G. College, Indore.
Secretaries of Gujerati Samaj College, Indore.
D. A. V. High School, Gwalior.

MADYA PRADESH

Shri E. W. Aryanayakam, Hindustani Talimi Sangh, Sevagram.
Kumari S. Abhyankar, Bhide Girls' High School, Nagpur.
Shri N Bangaram, Manager, Radha Soame High School, Timarni
Shrimati Mayadevi Bhatchandra, Yeotmal.
Shri W. M. Bodhankar, Principal, Technical Training Institute for Men Amraoti.
,, D. K. Bobli, Headmaster, Dhiran Kanyashala, Nagpur.

Shri S. K. Das, Kala Niketan, Jabalpur.
,, H. B. Dambe, Secretary, Swavalambic Shikshan Prasarak.
,, R. M. Deshmukh, M. P., Mandal, Wardha.
,, P. K. Deshmukh, Minister of Education.
,, N. R. Doli, Maltekdi Road, Amravati.
,, V. M. Dokras, Deputy Director of Public Instruction.
,, L. P. D'Souza, Principal, Prantiya Shikshan Mahavidyalaya, Jabalpur.
Father D'Souza, St. Francis de Sales High School, Nagpur.
Shri L. G. D'Silva Retd. Director of Public Instruction, Pachmarhi.
,, K. L. Dubey, Vice-chancellor, Nagpur University, Nagpur.
,, E. W. Frankin, Director of Public Instruction.
Lt. Col. Gini, Circle Commander, N. C. C., Camptee.
Shrimati Radhadavi Goenka, M. L. A., Akola.
Shri K. B. Godhole, Headmaster, Government Science Core High School, Amraoti.
,, A. R. Gokhale, Superintendent, Sewa Sadan High School, Nagpur.
,, G. S. Superintendent, C.P. & Berar Education Society's High School, Nagpur.
,, Seth Govindas, M P.
,, S. N. Gupta, Headmaster, Government High School, Chhindwara.
,, N. L. Inamdar, Founder, New Dex Education Society, Amraoti.
,, Kurule Jacob, Secretary, Christain Council of India, Nagpur.
,, V. S. Jha, Education Secretary, Nagpur.
Kumari J. John, Principal, St. Ursula's Girls' High School, Nagpur.
Shri Jawala Prasad, Jootishi, M.L.A., Sagar.
,, M. N. Kale, New English High School, Nagpur.
,, J. B. Kapur, Principal, Rajkumar College. Raipur.
,, V. G. Kelkar, Secretary, Secondary School Teachers' Association, Wardha.
,, R. L. Khare, Headmaster, Sitabai Sangai High School, Anjangaon, Surji.

Shrimati Ushabai Kolte, Nagpur.
Shrimati S. Kothewan, Supdt. Dadibai Deshmukh Hindu Girls' High School, Nagpur.

Shri Hans Kumar, Khandwa.
,, S. R. Londhe, Shivajee Education Society, Amravati.
,, K. T. Manglamurti, High Court Judge, Nagpur.
Shrimati Kamala Mani, Hony. General Secretary, National Council of Women in India, Nagpur.
,, Shri P. S. Mene, Director-in-Charge, Laxminarayan Institute of Technolagy, Nagpur.
,, S. S. Mishra, Headmaster, Model High School, Jabalpur.
,, W. P. Misra, Hoshangabad.
,, D. K. Mohoni, Retd. Dy. D.P.I., Nagpur.
Shrimati J. R. Modholkar, President, National Council of Women in India.
Shrimati Sita Parmanand, M.P. (Chhindwara).
Shri M. N. Paranjpe, Superintendent, Lokanchi Shala, Nagpur.
,, S. N. Prasad, Headmaster, Maharaja High School, Chhatarpur.
,, G. B. Puliwar, Superintendent, Girls' High School, Chanda.
Major Rana (Vr.C.), Officer Commanding, 2, M.P. Battalion.
Shri Y. B. Ranade, Jabalpur.
Shri E. C. Reddy, Headmaster, Beynon Smith High School, Belgaum.
Rev. J. E. Robinson, Headmaster, Christ Church Boys' High School, Jabalpur.
Kumari M. Ruthquist, Leader of a Swedish Vocational Guidance Institute, Stockholm.

Shri G. S. Sahasrabudhe, Dhantoli, Nagpur.
,, A. S. Sahgal, M.P.
,, D. H. Sahasrabudhe, General Secretary, Principals' Federation of Secondary School Teachers' Association, Nagpur
,, C. G. Sahasrabudhe, Divisional Supdt. of Education, Bilaspur Division.
,, R. C. Sanghi, President, Hitkarni Sabha, Jabalpur.
,, G. N. G. Shabdha Maha Koshal Mahavidyalya, Jabalpur.
,, H. L. Sharma, Headmaster, Madhorao High School, Jabalpur.
,, Ravi Shankar Shukla, Chief Minister.
,, A. S. Sahyre, M.P., Bilaspur.
,, Niranjan Singh, M.L.A., Mouza Madesur, Hoshangabad.
,, Pyare Lal Singh, M,L.A., Raipur.

Shri Iswar Singh, Ex-Deputy Director of Public Instruction, Jabalpur.
,, Khub Chand Sodhia, M.P., Sagar.
,, Somalwar, Principal, Somalwar High School.
,, A Stacey, Headmaster, Bishop Cotton High School, Nagpur.
,, M. J. Sule, Hony. Secretary, Superintendents' Association and Superintendent Sub High School, Nagpur.
Kumari Marjorie Sykes, Hindustani Talimi Sangh, Wardha.
Shrimati Ramabai Tanbe, Dhamtole, Nagpur.
Shri L. R. Wasnic, M L A, Nagpur.
Kumari West, Headmistress, J.N. Tata Parsi Girls' High School, Nagpur.
Chief Secretary, M.P., Government, Nagpur.
Development Commissioner, Nagpur
Deputy Director of Public Instruction, Nagpur.
Deputy Director of Technical Education.
Director of Agriculture.
Director of Industries.
Divisional Superintendent of Education and other Officers of the Department.

Headmasterses of

Anglo-India Schools, Nagpur.
Government Academic High School, Amravati.
High School, Nagpur.

Headmistress of

Government Girls' High School, Amravati.
J. N. Tata Parsi Girls' High School, Nagpur.
Lady Superior, St. Joseph's Convent High School, Jabalpur.
Members of the Academic Council, University of Nagpur.

Principals of

Shri Shivajee College, Amravati.
Engineering School, Nagpur.
Govt. Diploma Training Institute for Women, Amravati.
Bhide Girls' High School, Nagpur.
Training Colleges and Janta College, Amraoti.

Secretaries of

Board of Secondary Education.
Swavalambi Shikshan Prasarak Mandal, Wardha.
Superintendent of Reformatory School, Jabalpur.
Kurvey's New Model High School, Nagpur.
Hads High School, Jabalpur.
Representatives of
Shri Shivaji Education Society, Amravati.
Secondary School, in East Berar Division, Amravati.

MADRAS

Shri C.C. Abraham, Principal, Y.M.C.A. College of Physical Education. Saidapet, Madras.
,, G. I. Abraham, Headmaster, S P.G. High School, Nandyal
,, K. Balasubramania Aiyar, M.L.C., Correspondent, P.S Secondary School, Mylapore, Madras.
T. S. V. Aiyer, Headmaster, Shri Brihadambal Government High School, Pudukottai.
,, N. K. Aiyangar, Higher Elementary School, Vadaver, Tanjore.
Shrimati M Lukshmi Ammal, Madras Seva Sadan, Chetput, Madras.
Shri D. V. S. S. Apparao, Sydapuram, Nellore.
Rev. J. Aranha, Headmaster, St. Joseph's High School, Kozhikode.
Shrimati R. Arulappan. Headmistress, Bentinck High School, Vepery, Madras.
Shri T. V. Arumugam, Headmaster, M.D.T. Hindu College High School, Vannarpet, Madras.
,, B Arunnachalam, Headmaster, Board High School, Singarayonkonda, Nellore.
,, M. Arunnachalam, Headmaster, P.K.N. High School, Tirumangalam, Madurai.
,, D. S. Authimoolam, President, District Board, Tirunelveli.

Shri T. S. Avinashilingam Chettiar, M. P., Ramakrishna Mission Vidyalaya, Coimbatore.
„ C. R. Ayyangar, Periyanaickanpalayam, South Indian Teachers' Union, Triplicane, Madras.
Kumari Bagyam, Inspectress of Schools, Madurai.
Shri S. R. Balasubramaniam, Headmaster, S. A. High School, Tirukkattupalli, Tanjore.
Kumari Bernadette, Headmistress, St. Ann's High School, Bheemunipatnam, East Godavari District.
Shri J. P. Bhaskar, Wardlaw High School, Bellary.
Rev. A. J. Boyd, Principal, Madras Christian College, Tambaram, Madras.
Kumari K. N. Brockway, Principal, St. Christopher's Training College, Vepery, Madras.
Shri V. K. N. Chari, General Secretary, Council of Public Affairs, Madras.
„ V. T. Charya, T'Nagar, Madras.
„ T. Chengalvaroyan, Mayor, Corporation of Madras.
„ T. V. Chok Kappa, Salem College, Salem.
„ Muthiah Chettiar, Raja of Chettinad, Madras.
„ P. B. K. Raja Chidambaram, M.L.A., President, District Board, Tiruchirapally.
Kumari S. Chinnappa, Principal, Girls' Christian High School, Tanjore.
„ M. Cornelius, Ramakrishna Mission Vidyalaya, Coimbatore.
Shri P. Damodaran, M.P., Coimbatore.
„ A. Daniel, Headmaster, U.L.C. Mission High School, Bhimavaram,
Rev. Doraiswami, Headmaster, St. Xavier's College High School, Palamcottah.
Shri G. Dastgir, Retired Divisional Inspector of Schools, Kilpauk, Madras.
Rev. Mother Edwiga, St. Joseph's Girls' High School, Guntur.
Shri S. Kangaraj Elias, Headmaster, Corley High School, Tambaram, Madras.
Kumari J. F. Forrester. St. Christopher's Training College, Vepery, Madras.
Rev. T. R. Foulger, Principal, Meston Training College, Royapettah, Madras.
Shri V. K. P. Gounder, M.L.A., President, District Board, Coimbatore.
„ T. Govindarajan, Salem College, Salem.
„ B. M. Hegde, President, South Kanara District Board, Mangalore.
Shrimati Mona Hensman, M.P., Chetput, Madras.
Kumari Hemavati, Headmistress, Chintadriped Girls' High School, Madras.
Most Rev. Bishop A.M. Hollis, Madras.
Shri L. R. Chandrasekhra Iyer, Headmaster, Thiagaraya Chetty High School, Washermanpet, Madras.
„ M. R. Iyer, Headmaster, Rajah's High School, Ramnad.
„ S. Ramamurthi Iyer, Kumbakonam Educational Society, Kumbakonam.
„ S. Iyengar, Coimbatore.
„ Kuruvilla Jacob, Headmaster, Madras Christain College High School, Madras.
„ S. B. Joshi, Headmaster, Hindu Theological High School, Madras.
„ T. Kailasam, Puthukkottai, Tanjore.
„ L. H. Kelly, Agricultural Extension Advisor, Department of Agriculture, Madras.
„ M. V. N. Kameswararao, Headmaster, Maharajas College School, Vizianagaram.
„ J. G. Koilpillia, Principal, St. Peter's High School, Tanjore.
„ N. Krishnamachari, T. T. V. High School, Madras.
„ G. Krishnamurthi, M.L.C., Madras.
„ P. H. Krishnamurthi, Headmaster, E.C.M. High School, Hindupur.
„ P. S. Krishnamachari, Arkonam.
„ P. G. Krishnamurthi, Venapamula, Krishna District.
„ V. S. Krishna, Vice-Chancellor, Andhra University, Waltair.
„ Y. Krishnamurthi, Headmaster, Board High School, Tekkali.
Kumari V. Koman, Principal, Queen's Mary College, Mylapore, Madras.
Shri A. Kuppuswami, Sholinghur, N. Arcot.
„ M. S. A. Majid, Secretary, New College, Royapettah, Madras.
Rev. A. Marotta, Secretary, Catholic Education Council of South India, Perambur, Madras.
Kumari Eleanor D. Mason, Principal, Women's Christain College, Madras.
Shri K. A. Menon, Secretary, Southern India Chamber of Commerce, Madras.

Shri I. N. Menon, Principal, Thiagaraja College, Madurai.
,, S. Menon, Jt. Director, Besant School, Madras.
,, A. M. K. Mudaliar, Headmaster, Pachaiyappa's High School, Kancheepuram.
,, V. K. R. Mudaliar, President, Chingleput District Board.
,, K. N. Mukundan, President, Malabar District Board, Kozhikode.
Kumari M. I. Mullan, Principal, Bishop Azariah High School for Girls, Vijayawada.
Shri S. N. Murthi, Director, All-India Radio, Madras.
,, S. Muthiah, Headmaster, Caldwell High School, Tuticorin.
,, G. R, G. Naidu, President, Indian Chamber of Commerce, Coimbatore.
,, Govindarajulu Naidu, Director of Public Instruction, Madras.
,, P.S. Rajagopal Naidu, M.P., Vellore, Madras,
,, A. R. Naidu, Kondethope, Madras.
,, G. R. Naidu, Divisional Inspector of Schools, Godavari Division, Cacanada.
,, T. P. S. Naidu, Principal, Teachers' College, Madras.
,, N. V. Naidu, S.S.R.B. High School, Bheemanapalli, East Godavari.
,, S. R. V. Naidu, Manager, Labour Welfare Association High School, Madurai.
,, K. C. Naik, Deputy Director of Agriculture for Agricultural Education Madras.
,, M P. Nair, Lecturer, Ferook College, Ferook, S, Malabar.
,, V. A Nair, Salem College, Salem.
,, K. K. Nambyar, Retired Civil Surgeon, Edakkad, N. Malabar.
,, C. Narasimham, Commissioner, Corporation of Madras.
,, V. Narasimham, Headmaster, Municipal High School, Srikulam.
,, A. L. Narayan, Principal, Maharaja's College, Vizianagaram.
,, S. Natarajan, President, South India Teachers' Union, Triplicane, Madras.
,, K. V. S. Nayar, Officiating Circle Commander, N.C.C., Madras.
,, T. A. Pai, M.L.A., Madras.
,, K. Palaniappan, Educational Publisher, Madurai.
,, P. K. Panikkar, Principal, Government Training College, Kozhikode.
,, S. N. Panchanadeswar, President, Children's Garden School Society, Mylapore, Madras.
,, E. H. Parameswaram, M. L. C., Ambasamudram.
,, R. G. N. Pillai, Journalist and Social Worker, Pillaiyakam, Rajapalayam.
,, S. P. Pillai, Headmaster, Board High School, Tenkasi.
,, D. Purushotam, Secretary, District School Teachers' Guild Chittoor.
,, R. Radhakrishnan, Tatbad, Coimbatore.
,, C. Raghunathan, Divisional Inspector of Schools, Madurai.
,, G. Raghupathi, Retired Inspector of Schools, Pittapuram.
,, H. D. Rajah, M. S., Madras.
,, C. Rajagopalachari, Chief Minister, Madras.
,, R. Rajagopal, Secretary, District Teachers' Guild, Coimbatore.
,, S. T. Rajan, Madras.
,, K. Rajaratnam, Headmaster, C.A. Memorial High School, Nellore.
,, Ramamoorhi, Assistant Teacher, Madurai.
Shrimati N. Ramamurthi, Representative of the Women's Indian Association.
Shri S. G. Manavala Ramanujam, Ex-Vice-Chancellor, Annamalai University, Vepery, Madras.
,, T. Tamachandramurthi, Headmaster, Board High School, Kanumolu.
,, K. Ramadoss, Headmaster, Muncipal High School, Vizianagaram.
,, R. Ramanujachariar, Annamalai University.
,, D. Ramayya, Retired Divisional Inspector of Schools, Rajamundry.
,, V. Ramayya, Headmaster, Hindu College High Schools, Masulipatam.
,, V. R. Ranganathan, M.L.C., Retired D.P.I., Adyar, Madras.
,, M. V. Krishna Rao, Minister for Education, Madras.
,, M. N. Rao, Andhra, Headmasters' Association, Vijayawada.
,, M. R. Rao, Secretary, Guntur District Teachers' Guild, Guntur.
,, L. Subba Rao, Hony Legal Adviser to the Andhra University.
,, S. S. Rao, Board National High School, Ramachandrapuram.
,, R. S. Rao, Mylapore, Madras.
,, S. N. Rao, Headmaster, Board Middle School, Giddallur, Kurnool.
,, S. R. Rao, M.L.A., Madras.

Shri Sreenivasa Rao, Hindu College High School, Masulipatam.
,, T. B. Rao. Headmaster, Board High School, Amarpur.
,, P, Venkataramana Rao, Judge, Madras High Court, Madras.
,, U. Krihna Rao, Minister for Industries, Madras.
,, V. L. P. Rao, Secretary, India Geographical Society, University of Madras.
,, C. V. V. Raod, President, South India Hindi Teachers' Association, Mylapore, Madras.
,, B. A Reddy, Headmaster, Board High School, Desur, N. Arcot.
,, G. N. Reddy, President, Secondary Schools Headmaster's Association, Anantpur District.
,, V. K. Row, Medical officer, Presidency College, Madras.
,, M. Rutnaswami, Ex-Vice-Chancellor, Annamalai University, Madurai.
,, Rudrappasam, D.E.O., Madurai.
,, C. D. Samuel, Salem College, Salem.
Shrimati M. Samuel, Government Girls' High School, Salem,
Shri M. Shankarapandiam, M.P., Madras.
,, M. J. Sargunam, Principal, Union High School, Coimbatore.
,, N. V. S. Rama Sarma, General Secretary, Municipal High School, Eluru.
,, C. B. Sastri, Masulipatam.
,, Savarirayan, Principal, American College, Madurai.
,, M. Seetharamadas, M. L. C., President, District Board, Eluru.
,, S. Seshagiri, Headmaster, Municipal High School, Mayuram.
,, M. C. Seshachalam, Headmaster, Board High School, Chittoor.
Rev. W. F. Sequeira, St. Joseph's Seminary, Mangalore.
Shri P. Sitaram, Headmaster, Madurai.
,, T. P. Minakshi Srinivasan, Correspondent G. High School, Madras.
,, M. R. Srinivasan, Headmaster, Madura College High School, Madurai.
,, N. Srinivasan, Headmaster, City Municipal High School, Coimbatore.
,, G. Srinivasachari, President, Provincial Secondary Grade Teachers' Union Madras.
,, C. Subrahmanyam, Minister for Finance, Madras.
,, D. S. Subrahmanyam, Andhra Teachers' Federation, Elura.
,, M. V. Subrahmanyam, St. John's College, Palamcottah.
,, K. N. Subrahmanyam, Chittoor.
,, T. P. Sundaresan, Board High School, Papanasam.
,, T. N. Sundaram, Headmaster, Madras.
,, G. Sundaram, N.S.M.V.P.S. High School, Devakottai.
,, T. Surya Prakasam, Headmaster Hindu College High School, Guntur.
,, Shrimati K. Sundaravadivelu, Hony. Director, Junior Red Cross, Madras State Branch.
Rev. D. Swami, St. Xavier's College High School, Palamkottah.
Shri A. N. Tampi, Principal, Alagappa College, Karaikudi, Retired D.P.I., Trivandrum.
,, K. Thiagaraja Chettiar, Medurai.
,, S. Thiagarajan, Madurai.
Kumari E. M. Thillaiambalam, Principal, Lady Doak College, Madurai.
Shri C. T. Thirumalai, Salem College, Salem.
,, K. M. Unnithan, I.C.S., Secretary to Government, Education Department, Madras.
,, M. Vaidyanathan, Secretary, West Coast Industrialists' Association, Kozhikode.
,, P. S. Vaidyanathan, Secretary, Gopalapuram Boys' High School, Madras.
,, R. Vaidyanathan. President, Graduate Assistant Teachers' Association, Chintadripet, Madras.
,, T. P. S. Varadan, Headmaster, Hindu High School, Triplicane, Madras.
,, K. P. Varid, Headmaster, Malabar Christian College, Kozhikode.
,, R. Venkataswamy, Chairman, Southern India Millowners' Association, Coimbatore.
,, K. Venkataratnam, President, District Board, Krishna, Chilakalapudi.
,, S. Venkataraman, Secretary, Headmasters' Association, Coimbatore & Nilgiris, Peelamedu.
,, Y. Rama Yogi, Headmaster, Board High School, Puthur, Chittoor.
Chairman & Members of Public Service Commission, Madras.

Divisional Inspector of Schools, Godavari Division, Waltair.
" " " Coimbatore Division.
Department of Education, Madras and its officers.
General Manager, Southern Railways, Madras.
Headmaster,
Board High School, Puttur, District Chittoor.
Board High School, Tiruvarur, District Tanjore.
Board High School, Dharmapuram.
C.B.M. High School, Visakhapatnam.
Ganapathy High School, Manga ore.
Mahendra High School, Attimallik.
Malabar Chrisian College High School, Kozhikode.
Municipal High School, Rasipuram.
Municipal High School, Cannanore.
National College School, Teppakulam, Trichy.
Pittapur Rajah's Collegiate School, Cocanada.
Ramaseshier High School, Pattamadai.
Rajah's High School, Kollengode.
R. V. N. Board High School, Ravinuthala, Ongole.
Sarva Jana High School, Peelamedu.
St. Mary's High School, Madurai.
Sir S. A.'s High School, Tirukkattupali, Tanjore.
Thiagaraya Chetty High School, Madras.
Tilak Vidyalaya High School, Kallidaikurchi, Tirunelveli District.
T. H. School, Narasapur.
Zamorin's College, High School, Kozhikode.
Headmistress,
Hindu Girls' High School, Tiruvarur, Tanjore District.
Lady Wellingdon Training College, Secondary Section. Triplicane, Madras.
Sherman Memorial Girls' High School, Chittoor.
St. Ignatius Convent High School, Palamcottah.
Heads of Institutions for Handicapped, Madras.
Minister for Education,
Accommodation & Control.
Rural Welfare, and
Finance.
Minister for Local Administration.
Agriculture.
Members of
Executive Committee of Indian Red Cross Society.
Inter-University Board.
President,
Teachers' Association, Madura.
Andhra Teachers' Federation.
Andhra Headmasters' Association.
Graduate Assistant Teachers' Association, Madras.
Principal,
Colleges, Coimbatore.
Training Colleges, Madras.
Art Colleges, Madras.
Girls' Christian High School, Tanjore.
Government Training College, Mangalore.
Lawrence School, Lovedale, Nilgiris
Providence Women's College, Kozhikode.
Pittapur Rajah's Collegiate School, Cocanada,
Vivekananda College, Mylapore, Madras.
Personal Officer for Railway Schools, Madras.
Representatives of
Andhra Headmasters' Association, Waltair.
Andhra University, Waltair.
Andhra Teachers' Federation, Waltair.
Bharat Scouts & Guides, Madras State, Madras.
Chamber of Local Board.

Representatives of

Christian Educational Council of South India.
Coimbatore Chamber of Commerce.
District Teachers' Guild, Madurai.
District Teachers' Guild, Coimbatore.
District Headmasters' Association, Coimbatore.
Federation of University Women in India, Madras Branch.
Girl Guides Association, Madras.
Indian Chamber of Commerce, Coimbatore.
Krishna Teachers' Guide, Waltair.
Local Boards Association, Madras.
Madras Aided Secondary School Managers' Association, Madras.
Madras Teachers' Guide.
Madras Headmasters' Conference.
Madurai Mills, Madurai.
Sri Kamarkrishana Math, Madras.
South Indian Catholic Educational Council, Madras.
South Indian Muslim Educational Council, Madras.
Southern Indian Millowners' Association, Coimbatore.
South Indian Teachers' Union, Madras.
South Indian Chamber of Commerce, Madras.
Messrs T. V. Sundaram Iyenger & Sons, Ltd., Madurai.
Teachers' Association, Madurai.
Tamil Chamber of Commerce, Madras
University of Madras.
Visakhapatnam District Teachers' Guide, Waltair.

Secretary,

Indian Rationalists' Association, Madras.
Madras Aided Secondary School Managements' Association, Madras.
Society of Geographers, Madras.

Staff of Joseph's Training College for Women, Guntur.

MYSORE

Shri K. S. Acharlu, Superintendent, Teacher Training Centre, Vadyanagar Bangalore.
Kumari Albuqurque, Bangalore.
Shri R. A. B. Anderson, Baldwin Boys' High School, Bangalore.
Rev. Pat. H. Aranjo, Principal, St. Germain High School, Cleveland Town, Bangalore.
Sister M. Antoinette, Principal, Mount Carmel College, Bangalore.
Shri B. V. Banumiah, Principal, D. Banumia College of Commerce, Mysore.
Shrimati Rahamathunnisa Begum, Headmistress, Maharani's High School, Mysore.
Shri N. Bhardriah, General Secretary, Mysore State Adult Education Council, Mysore.
Rev. C. A. Browne, St. Mary's Orphanage, Bangalore.
Shri D. H. Chandrasekharih, Ex-Minister for Education, Basavangudi, Bangalore.
,, C. A. Char, Secretary, Pandits Association of Education Department of Mysore State.
Shrimati Kamla Dasappa, Bangalore.
Shri T. Gangadhara, Inspector of Commercial Schools, Bangalore.
,, J. G. Ghanekar, Marimallapp's High School, Mysore.
,, D. B. Gordon, Retired Registrar, Mysore University, Mysore.
Shrimati Govindaswami, Bangalore.
Shri A. C. Deva Gowda, Principal, Teachers' College, Mysore.
,, K. Guru Dutt, Retired Director of Public Instruction, Bangalore.
,, D. Gurumurti, Basavangudi, Bangalore.
Kumari M. E. Hardy, Principal, Bishop Cotton Girls', Bangalore.
Shrimati Indiramma, Bangalore.
Shri M. A. Narayana Iyengar, Retired Deputy Director of Public Instruction, Bangalore.
,, T. S. Rajagopala Iyengar, Mysore.
,, G. S. Sampath Iyengar, Gorur, Hussan District.
,, A. R. Sampatu Iyengar, Maharani's High School, Mysore.

Shri M. A. Srinivasa Iyengar, Headmaster, Acharya High School, Goribidnur, Mysore.
„ M. Venkatesa Iyengar, Retired Excise Commissioner, Bangalore.
„ P. A. Jai Chaind, Headmaster, Corporation High School, Bangalore.
„ N. K. John, Bangalore.
„ K. A. Kalappaji, Headmaster, Government High School, Chikmagalur, Mysore.
„ S. Kariyappa, Rural Education Society, Kanakpura District, Bangalore.
„ L. N. Kotar, Bangalore.
„ B. Kuppuswamy, Professor of Psychology, Mysore University, Mysore.
„ J. B. Mallaradhya, Director of Public Instruction, Mysore.
„ B. L. Manjunath, Vice-Chancellor, Mysore University, Mysore.
„ T. Madiah Gowda, M. P., President, Mysore State Adult Education Council, Mysore.
„ T. Singaravelu Mudaliar, Ex-Vice-Chancellor, Mysore University Bangalore.
„ K. Kuppaswamy Naidu, President, Chamber of Commerce, Bangalore.
„ S. Narasimhan, Headmaster, R. B. A. N. M.'s High School, Bangalore.
Shrimati Nagendra, Bangalore.
Rev. Fr. W. Picardo, Principal, St. Joseph's Indian High School, Bangalore.
Shri K. Puttaswamy, Advocate Mysore.
„ C. V. Raman, Raman Institute of Physics, Bangalore.
„ M. Anantha Rama Rao, Headmaster, Govt. High School, Shimoga.
„ K. Kodanda Rao, Servants of India Society, Bangalore.
„ K. Sampathgiri Rao, Principal, National College, Bangalore.
Shrimati L. S. Seshagiri Rao, Bangalore.
Shri M. R. Sripathi Rao, General Secretary, Bangalore Teachers' Association, Malleswaram.
„ Mahabala Rao, Mysore State Education League, Bangalore.
„ A. G. Ramchandra Rao, Minister for Education, Mysore.
„ C. Rangachar, Registrar Mysore University, Mysore.
„ H. Rangachar, Bangalore.
„ M. Govinda Reddy, Chitaldroog, Mysore.
„ M. P. L. Shastry, Headmaster, Gandhi Nagar High School.
„ L. Sabaiya, First Principal, Grade College, Mysore.
Shrimati Sardamma, Bangalore.
Shri M. Siddalingiah, Retd. Principal, Teachers' College, Mysore.
„ G. P. Siva Ram, Secretary Secondary, Education Board, Bangalore.
„ Sivaramaiya, Superintendent, School for Deaf & Blind Boys, Mysore.
„ D. Sivaramaiah, Principal, Govt. Training College, Mysore.
„ D. Narsimha Shastry, Shri Girvana Vidyapitham, Bangalore.
„ K. Srinivasan, St. Joseph's Indian High School, Bangalore.
„ H. V. Srirangaraj, Headmaster, Govt. Boys' High School.
Shrimati Sunandamma, Bharat Sava Dal, Mysore.
„ Sivakumara Swamigalu, Sri Siddaganga Mutt, Tumkur District.
„ T. Vasudevaiya, Inspector of Schools, Bangalore.
Shrimati Vasudevamurthy, Bangalore.
„ D. S. Venkanna, Superintendent, Sri Jaya Chamarajendra Occupational Institute, Bangalore.
„ D. Visweswariya, Headmaster, Govt. High School for Boys, Malleswaram, Bangalore.
Shrimati Vijayambal, Bangalore.
H. H. the Maharaja Shri Jay Chamaraja Wadiyar, Mysore.
Shri J. D. Wilfred, Headmaster, Methodist Mission Secondary School, Bangalore.
Kumari Weston, Principal, Baldwin's Girls High School, Bangalore.
Director of Agriculture, Mysore.
Director of Industries, Bangalore.
Headmasters of

Govt. High School, Devangere
National High School, Basvangudi, Bangalore.

Headmistress of

St. Teresa's Girls' High School, Bangalore.
Shrimati Kamlabai Girls' High School, Bangalore.
St. Euphrasia's Girls' High School, Good Shepherd Convent Bangalore.
Sacred Heart Girls' High School, Bangalore.

Officers of the Department of Education, Bangalore.
President, Mysore State Women's Conference, Basavangudi, Bangalore.
Principals of St. Philmore's College, Mysore.
St. Aloysins High School, Bangalore.
Representative of Mahila Samaj, Bangalore.
Headmasters of Schools, Bangalore.
Teacherss' Organisation, Bangalore.
Secretary to the Govt. of Mysore, Education Department.
Secretary, Mysore State Education League, Bangalore.
Staff of the Central College, Bangalore and the Indian Institute of Science, Bangalore.

ORISSA

Shri C. M. Acharya, Ex-Vice-Chancellor, Utkal University.
Shrimati Malati Choudhury, Cuttack.
Shri Naba Krushna Choudhury, Chief Minister, Cuttack.
„ S. B. Chowdhury, Cuttack.
„ B. C. Dass, Principal, Samanta Chandrasekhar College, Puri.
„ B. k. Dass, Headmaster, P. M Academy, Cuttack.
„ Nilkantha Das, M. L. A., Cuttack.
„ N. Das, Headmaster, Angul High School.
„; S. Das, Chairman, Public Service Commission, Cuttack.
Shrimati Shailabala Das, M. P., Cuttack.
Shri N. Kanungo, M. P. Cuttack.
„ G. Mahapatro, M. L A., Jeypore.
„ Harihar Mahapatro, Advocate, Cuttack.
„ Artaballay Mahanty, Utkal Sahitya Sabha, Cuttack.
„ S. Mahanty, Member, Public Service Commission, Cuttack.
„ H. Misra, Inspector of Schools, Bolangir.
„ Lingaraj Mishra, M. P., Cuttack.
„ P. Mishra, Vice-Chancellor, Utkal University, Cuttack.
Pandit Godavaris Misra, M. L. A. Ex-Minister for Education, Cuttack.
Shri S. S. Misra, Servants of India Society, Cuttack.
„ D. S. Mitra, Retired District Inspector of Schools, Cuttack.
Kumari N. Nayak, Retired Inspectress of Schools, Cuttack.
Shri S. Nath, Organiser of Basic Education Cuttack.
„ K. C. Panda, Headmaster, Brunaban Vidyapith, Hingilicut.
„ B. P. Parija, Pro-Chancellor, Utkal University, Cuttack.
„ Ratnakar Pati, Retired Professor, Ravenshaw College, Cuttack.
„ B. N. Patnaik, Headmaster, Zilla School, Puri.
„ G. Patnaik, Headmaster, Raja D. D. High School, Bonai.
„ M. C. Pradhan, Ex-D. P. I., Cuttack.
„ B. Prasad, Director of Public Instruction, Cuttack.
„ A. Rath, Vice-President, Orissa Secondary Teachers' Association, Cuttack.
„ B. N. Rath, Headmaster, Zilla School, Sambalpur.
„ G. C. Rath, Registrar, Utkal University, Cuttack.
„ Radhanath Rath, Minister for Education, Cuttack.
„ V. B. Roy, Retired Professor, Ravenshaw College, Cuttack.
„ G. S. Roy, Retired Professor, Ravenshaw College, Cuttack.
„ D. Sahoo, Headmaster, Bhuvan High School.
„ Dinabandhu Sahu, Minister for Law, Cuttack,
„ Lakshminarayan Sahu, Servants of India Society, Cuttack.
Kumari B. Sarangi, Inspectress of Schools, Cuttack.
Shri R. Sharangi, Education Secretary, Cuttack.
Shrimati I. L. Sinha, Principal, Sailabala Women's College, Cuttack.

Headmaster

Ravenshaw Collegiate School, Cuttack.
City High School, Berhampur.
Secondary Training School, Cuttack.
Kamakhyanagar High School.
Hindol High School.
Raja Artatran High School, Khariar.
Ranihat High School, Cuttack.
Christ Collegiate School.
Bhakta Madhu Vidyapith.
U. B. High School, Russelkonda.

Principal

Khallikote College.
Radhanath Training College, Cuttack.

Representatives of

Orissa non-Government Secondary School Teachers' Association, Cuttack.

Aided Schools Headmasters' Association, Cuttack.

Secretary, Orissa Chamber of Commerce.
Basic and Adult Education Officer.
Chief Inspector of Physical Education.
Inspectress of Physical Education.
School Medical Officers and other Departmental Officers

PEPSU

Shri Harnam Singh, Director of Education (Interview at Jullundur).
Shri Jaswant Singh, Principal, Brijindra College, Faridkot.
Kumari S. Seoni, Divisional Inspectress, Patiala.

PUNJAB

Shri Balraj, President, D. A. V. College Management Committee, Jullundur.
Kumari P. K. Banker, Inspectress of Industrial Schools for girls, Simla.
Kumari V. G. Bhan, Deputy Chairman, Legislative Council, Simla.
Shri Suraj Bhan, Principal, D. A. V. College, Jullundur.
„ J. C. Banati, Headmaster, M. B. High School, Amritsar.
„ F. S. Dean, Retired P. E. S., Ambala.
„ C. L. Fletcher, Commissioner, Jullundur.
Shrimati A. E. Harper, Training School for Village Teachers, Moga.
Shrimati S. Y. Harvey, Principal, Women's Training College, Jullundur.
Shri A. C. Joshi, Principal, Government Training College, Jullundur.
„ C. L. Kapoor, Director of Public Instruction, Simla.
„ G. D. Khanna, Head of the Department of English, Government College, Ludhiana.
„ Jagan Nath, Deputy Inspector of Schools, Jullundur.
„ Chand Narain Raina, Deputy Commissioner, Jullundur.
„ Dev Raj, Secretary. Headmasters' Association, Amritsar.
„ Hem Raj, M. P., Kangra
„ S. K. Roy, Training School for Village Teachers, Moga.
„ R, N. Sahai, Headmaster, D. B. High School, Atari.
„ Ramlal Sapra, D. A. V. College Managing Committee, Jullundur.
„ Bhagat Singh, Headmaster, Khalsa Collegtate School, Amritsar.
„ Bhupal Singh, Registrar, Punjab University, Simla.
„ G. C. Singh, Inspector of Schools, Jullundur.
„ Trilochan Singh, Principal, Government College, Ludhiana.
„ N. Singh Talib, Principal, Khalsa College, Jullundur.
Kumari J. F. Wylie, Principal, Auckland House, Simla.
Department of Public Instruction Officers
Director of Industries.
Executive Officer, Amritsar Municipality.
Inspector of Schools, Bhatinda Division, Sangrur.
Headmaster, Government High School, Amritsar.
Headmasters of

Alexandra Girls' High School, Amritsar.
Government Girls' High School, Jullundur.

Principals of

Arts Colleges, Simla.
Science Colleges, Simla.

Representatives of

District Headmasters' Association, Jullundur.
Khalsa College, Amritsar.
Hindu Sabha College, Amritsar.

Staff of Government Training College, Jullundur.

RAJASTHAN

Shri K. P. Bhargava, Jaipur.
Shrimati S. Bhartiya, Representing the Teachers' Association, Jaipur.
Shri K. L. Bordia, Vidyabhavan, Udaipur.
,, S. C. Desai, Director of Agriculture, Jaipur.
,, M. C. Dravid, Headmaster, Agarwal High School, Jaipur.
,, J. W. Drummond, Chairman, Rajputana Mission Council of C. S., Nasirabad.
Kumari Irene Glass, Secretary, Rajputana Mission Council of C. S., Nasirabad.
Shri M. N. Godbole, Director of Industries, Rajasthan.
,, R. S. Gupta, Government Inter College, Banswara.
,, P. C. Jain, Representing the Teachers' Association, Jaipur.
,, S. S. Jain, K. D. Jain High School, Kishengarh.
,, Kumari A. Karkare, Headmistress, Maharani Girls' High School, Jaipur.
Shri K. N. Kini, Adviser, Gandhi Rural University, Sardarshahr.
,, R. V. Kumbhare, Assistant Director of Education, Jaipur.
,, V. Lakminarayanan, Principal, Birla College of Engineering, Pilani.
,, L. G. Luther, Principal, Maharani Gayatri Devi Girls' Public School, Jaipur.
,, G. S. Mahajani, Vice-Chancellor, University of Rajputana, Jaipur.
Rev. E. F. Mann, Principal, St. Xavier's High School, Jaipur.
Shri P. N. Mathur, Ex-Minister for Education and Education Secretary, Banasthli Vidyapith, Jaipur.
Shri Mohan Singh Mehta, Indian High Commissioner at Karachi, Udaipur.
Kumari B. Menon, Principal, Rajasthan Mahila Vidyalaya, Udaipur.
Shri Nathuram Mirdha, Minister for Education, Jaipur.
,, Ayodhya Prasad, Ex-Director of Education, Matsya, Alwar.
,, S. S. Saksena, Principal, Maharana Bhopal College, Udaipur.
,, Ratan Singh, Principal, Sadul Public School Bikaner.
Shrimati Sarla Sinha, Secretary, W. C. National Council of Women of India, Jaipur.
Shri R. P. Shrivastava, Deputy Director of Education, Jaipur.
,, M. L. Sharma, Director of Education, Jaipur.
,, Vishnu Dutt Sharma, Secretary, Education Department, Jaipur.
,, Hiranand Shastri, Banasthli Vidyapith, Jaipur
Shrimati Ratnadevi Shastri, Banasthli Vidyapith, Jaipur.
Shri Vidyadhar Shastri, Akhil Bharat Sanskrit Sahitya Sammelan, Bikaner.
,, B. G. Tewari, Inspector of Schools, Jaipur.
,, K. L Verma, Principal, Maharaja's College, Jaipur.
,, D. V. Wadadekar, Headmaster, Chopasni High School, Jodhpur.
,, Ram Narain Yadav, Madhyamic Pathshala, Siswali.

Headmasters,
Government High Schools, Udaipur.
Scottish Mission High School, Jaipur.
Swetamber Jain High School, Jaipur.

Representatives of
Managers of Schools, Jaipur.
Managers of Schools, Udaipur.
Scouts Association, Jaipur.

Registrar, Rajputana University.
Staff of the Vidya Bhavan Training College, Udaipur.

SAURASHTRA

Acharya Jayant, Headmaster, Virna High School, Rajkot.
Shri V. N. Anjaria, Assistant Teacher, Alfred High School, Bhavnagar.
,, D. M. Bhatt, Education Secretary.
,, Nanabhai Bhatt, M. P., Grahm Dakshinmurti, Ambla.
Shrimati Subhadra, Behan, Sajkot.
Shri S. K. Buch, Headmaster, Alfred High School, Bhavnagar.
,, A. K. A. L. Chamadia, Dhomaje.
,, U. N. Dhebar, Chief Minister.
,, Joshi, Assistant Director of Education, Rajkot.
,, N. S. Joshipura, Secretary, Education Association, Porbundar.
,, Mansukhlal Johanputra, Rajkot.
,, J. D. Maru, Headmaster, Wankaner High School, Wankaner.

Shri Jadavji K. Modi, Minister for Education, Rajkot.
" B. M. Shah, M. P., Bhavnagar.
" C. N. Shah, Headmaster, Mukta Laxmi Maha Vidyalaya, Bhavnagar.
" D. L. Sharma, Director of Education, Rajkot.
" C. Tejpal, Rajkot.
" Harbhai Trivedi, Principal, Gharsala, Bhavnagar.
Director, Shardagram, Bharat Sarasvati Mandir, Sansad.
Headmistress, Shree Vallabh Kanya Kelavani Mandal, Rajkot.

TRAVANCORE-COCHIN

Shri T. A. Abdulla, Advocate, Alleppey.
" V. S. T. Ayyar, Headmaster, S. D. V. High School, Alleppey.
" P. T. Alexander, Director of Physical Education, Trivendrum.
Rt. Rev. Bishop M. Athanasino, Syrian Church, Trivendrum.
Shri Swami Atmananda, Ex-President, Cochin D. C. C. Chittur.
Shrimati A. K. Amma, Member, Travancore University Senate, Trivendrum.
Shrimati B. A. Amma, Principal, Women's College, Trivendrum.
Shrimati P. R. Parukutty Amma, Inspectress of Govt. Schools, Trivendrum.
Shri Swami Agamananda, Shri Ramakrishna Advaita Ashram, Kaladi.
" K. M. Bijli, Inspector of Schools, Trivendrum,
" A. Cheriyan, Inspector of Schools, Quilon.
" T. T. Chacko, Headmaster, M. T. S High School, Kottayam.
Shrimati K. M. George, Retd Inspectress of Schools, Trichur.
Shri Swami Ghananda, Earnakulam.
" R. Venkatachala Iyer, Inspector of Schools, Irinyalakuda.
" L. Anantakrishna Iyer, Retd. Inspector of Schools. Nagarcoil.
" C. A. Vaidyanatha Iyer, Headmaster, High School, Chittur.
" T. S. Krishna Iyer, Retd. Headmaster, Trivendrum.
" J. M. John, President, Departmental Teachers' Association, Trivandrum.
" T. Jayaram, English High School, Munnar.
Rt. Rev. Bishop C. K. Jacob, Kottayam.
Shri V. I Joseph. General Secretary, All-Travancore Private Secondary School Teachers' Association, Kottayam.
" A. J. John, Chief Minister and Minister for Education, Trivandrum
" E. Kurien, Headmaster, Govt. Middle School, Sasthmkotta.
Rev. Father Paul, Kunnuakal Headmaster, Leo High School, Alleppy.
Shri K. J. Kurup, General Secretary, I. C. Primary Teachers' Association, Trivandrum.
" C. O. Karunakaran, Special Officer, Medical College, Trivandrum
" K. K. Kuruvilla, Thiruvalla, Trivandrum.
" M. Kesavan, Ex-Chief Minister, Trivandrum.
" C. Kesavan, M.L.A., Petta.
" K. Govinda Kaitha, Retd. Superintendent of Survey, Ernakulam.
" A. A. D. Luiz, M.L.A., Ernakulam.
" K. R. Menon, Retired Inspector of Schools, Ernakulam.
" K. A. Raghava Menon, Inspector of Schools, Trichur.
" P. Kuttikrishna Menon, Organising Commissioner, Bharat Scouts and Guides, Trivandrum.
" K. J. Leenose, Headmaster, Model School, Trivandrum.
Shrimati V. Menon, Retd. Headmistress, Ernakulam.
Shri V. Sundaraja Naidu. D.P.I., Trivandrum.
" V. Narayanan, Headmaster, S.S P.B. High School, Kodakpur.
" V. P. Damodaran Nayar, Cambridge, Kaithamukku.
" V. Madhavan Nair, Headmaster, N.S.S. High School, Perunnai.
" Pratapachandran Nair, Officer Commanding, 1st Travancore Battalion, N.C.C.
" P. S. Nambiar, Shri Kerala Verma College, Trichur.
" P. K. Namboodiripad, Inspector of Schools, Muvattupuzhe, Trivandrum.
" Lucose Ottathayil, Law College, Ernakulam.
" Venkulam Parameshwaran, President, All-Travancorc R.B B.D., Sangathanam.
" K. M. Padmanabha Pillai, Trivandrum.
" M. K. Govinda Pillai, Retd. Engineer, Trivandrum.
" B. K. Pillai, Headmaster, S.M.V. School, Trivandrum.
" M. P. Parameshwaran Potti, Shivagiri High School, Varkala.
" Sivaram Panicker, Trivandrum.

Shri P. N. Panicker, Secretary, All-Travancore Gradhashala Sangham, Trivandrum.
,, P. K. Pillai, Headmaster, Model School, Trivandrum.
,, K. Pillai, Assistant Secretary, Education Department, Trivandrum.
,, P. T. K. Narayana Pillai, Advocate, Trivandrum.
,, P. A. T. Pillai, M.L A., Trivandrum.
,, P. S. Nataraja Pillai, M.L.A., Trivandrum.
,, A. S. Pillai Vizhuthakad, Trivandrum.
,, K. M. Padmanabha Pillai, Member of the Board of Education, T. C. State.
,, N Damodharan Pillai, Secretary, Departmental Teachers' Association, Trivandrum
,, M. K. Raman, Inspector of Schools, Tiruvalla.
,, M. V. Kesava Rao, Principal, College of Engineering, Trivandrum.
,, V. Ramanathan, Principal, S. D. College, Alleppey.
,, P. J. Thomas Formerly Economic Adviser, Government of India, Ernakulam.
,, R. V. Thampuran, Inspector of Schools, Ernakulam.
,, C. S. Venkateswaran, Dean, Faculty of Science, Travancore University Trivandrum.
,, Alexander Vakayil, Headmaster, St. Peter's High School, Kumbhalanghy, Cochin.
,, V. C. Varugese, General Secretary, A. T. P. B. B D., Sangatham, Trivandrum.
,, T. Paul Verghese, Principal, Training College, Trichur.
Shrimati A. I. Verghese Ley, Headmistress, Girls' High School, Tiruvalla.
Shrimati Annamma Verkey, Prof. of Mathematics, Travancore University, Trivandrum.
Rev. Fr. William, Principal, St. Berchman's College, Changanacherry.
Director of Agriculture, Trivandrum.
Director of Industries, Trivandrum.
Pro-Vice-Chancellor, University of Travancore.
Principal.
Maharaja's College, Ernakulam.
St. Teraesa's College, Ernakulum.
Training College Ernakulam.
Training College, Trivandrum.
Engineering College, Trivandrum.
Medical College, Trivandrum.
University College, Trivandrum.
Mahatma Gandhi College, Trivandrum.
Sanskrit College, Trivandrum.
Institute of Textile Technology, Trivandrum.
Intermediate College, Trivandrum.
St. Albert's College, Ernakulam.
S. H. College, Ernakulam.
Sacred Heart's College, Thevara.

Representative,
Travancore-Cochin Teachers' Association, Ernakulam.
Graduate Teachers' Association, Trivandrum.
The Manager of Schools, Trivandrum.
The Indian Chamber of Commerce, Trivandrum.
The Akila Kerala Sanskrit Parishad, Ernakulam.
Departmental Graduate Teachers' Association, Haripad.
All-Travancore Private Secondary School Teachers' Association, Palai.
Secondary Teachers' Association, Trichur.
Cochin Teachers' Association, Trichur.
Cochin Under-Graduate Teachers' Association, Trichur.
Cochin Aided Primary Teachers' Association, Trichur.
School Teacher, Kottayam.
All-Travancore Private Secondary School Teachers' Association. Kottayam.

Secretary,
Department of Education, Trivandrum.
Trivandrum Council of Women, Keshav Bhagh, Trivandrum.
The Travancore Chamber of Commerce, Trivandrum.

President, The Alleppey Chamber of Commerce, Travancore.

Headmaster,

St. George's Training College, Vazhakulam.
St. Thomas College High School, Trichur.
High School, Quilon, Travancore-Cochin.
M. H. School, Cuddapah.
High School, Vadayar.
S. D. V. High School, Alleppey.
St. Albert's High School, Ernakulam.
T. D. High School, Cochin.
H.E.H.M.M. High School, Mattancherry.
N.S.S. High School, Perunnai.
St. Berchman's High School, Changanacherry.
Balikamandahom High School, Thiruvella.
Scott Christian High School, Nagercoil.
Vedessery S.M.R.V. High School, Nagercoil.

Headmistress, Cotton Hill Girls' High School, Trivandrum.
Girls' High School, Thiruvella.

TRIPURA

Shri Ashutosh Bhattacharjee, Headmaster, Kamalapur H.E. School, Tripura.
,, Dhrubadas Bhattacharjee, Headmaster, Prachya Bharati, Agartala.
,, R. N. Roy Choudhury, Headmaster, Pragati Vidya Bhavan, Agartala.
,, S. Sen Gupta, Headmaster, Khowai Govt. High School, Khowai.
Headmaster, Netaji Subash Vidyaniketan, Agartala.
Headmistress, M.T. Girls' High School, Agartala.

UTTAR PRADESH

Shri S.C. Agarwala, Principal, Agrawala Vidyalaya Inter College, Lucknow.
,, Mohamed Ahsanullah, President, U.P. Assistant Teachers' Association, Allahabad.
,, N. M. Antani, Member, Secondary Education Review Committee, U.P.
,, U. A. Asrani, Hindu University, Banaras.
,, V. C. Asthana, Mirzapur.
,, B. L. Atreya, Hindu University, Banaras.
,, A. C. Banerji, Vice-Chancellor, Allahabad University.
,, C. L. Bhatia, Director, Bureau of Psychology, Allahabad.
,, L. M. Bhatia, Director of Cottage Industries, Lucknow.
,, R. L. Bhatia, Hindu Inter College, Bijnore.
,, K. P. Bhatnagar, D. A. V. College, Kanpur.
,, D. R. Bhattacharya, Ex-Vice-Chancellor, Allahabad University, Allahabad.
,, Krishan Chand, Additional Secretary, Education Department, Lucknow.
,, Krishna Chandra, M.P. Brindaban.
,, A. C Chatterji.
,, Bhagwan Das, Banaras.
,, A. N. Das, Director, Health Services, Lucknow.
,, Madhusudan Das, Secretary, Foundation Committee, Gorakhpur University, Gorakhpur.
,, Baba Raghava Das, Banaras.

Shri H. A. N. David, Principal, St. John's Higher Secondary School, Agra.
,, S. C. Deb, Allahabad University, Allahabad.

Acharya Narendra Deva, Vice-Chancellor, Hindu University, Banaras.
Shri D. R. Dhingra, Principal, H.B. Technological Institute, Kanpur.
,, Sharda Prasad Dubey, General Secretary, Educational Officers' Association, Allahabad.
,, B. Ghosh, Government Central Pedagogical Institute, Allahabad.
,, S. K. Ghosh, Retd. Director of Education, Allahabad.
Kumari S. Gorawala, Lucknow.

Shri Girja Shanker Gaur, Secondary Teachers' Association, Banaras.
,, N. D. Gotho, Secretary, U. P. Educational Services Association, Allahabad.
,, Misri Lal Gupta, Dayalbag, Agra.
,, J. P. Gupta, Principal, M.D. Jain Inter College, Agra.
,, Jey Dev Gupta, Amrita Bazar Patrika, Kanpur, President, Kanpur Working Journalists' Union, Kanpur.

Shri Iqbal Narain Gurtu, Ex-Vice-Chancellor, Allahabad University, Banaras.
,, B. S. Haikerwal, Secretary, Allahabad University Enquiry Committee, Allahabad.
,, M. N. Hussain, Deputy Director of Education, Banaras.
,, Zakir Hussain, Vice-Chancellor, Aligarh University, Aligarh.
,, B. N. Jha, Director of Education, Lucknow.
,, S. M. Jha, Lucknow Vishwa Vidyalaya, Lucknow.
,, Kalidas Kapoor, Lucknow.
,, B. N. Kar, Principal, Anglo-Bengali College, Allahabad.
,, R. L. Kaura, Director, Animal Husbandry, Lucknow.
,, H. L. Khanna, Kanpur.
,, Hira Lal Khanna, Banaras.
,, S. K. Kulshreshtha, Bureau of Psychology, Allahabad.
,, R. N. Lahirs, Constructive Training College, Lucknow.
,, S. B. Lall, Deputy Director of Education, Allahabad.
,, A. S. Lall, Asstt. Director of Vocational Training, Lucknow.
,, P. N. Mathur, Director of Physical Education, Lucknow.
,, R. D. Misra, Lucknow University, Lucknow.
,, Madan Mohan, Principal, Meerut College, Meerut.
,, Ram Narain Misra, Retd. P. E. S., Banaras.
,, R. S. Misra, Director of Military Education, Lucknow.
,, S. C. Mukerji, Principal, V. Hindu Intermediate College, Lucknow.
,, A. C. Mukerji, Allahabad University, Allahabad.
,, L. Mukerji, Lucknow University, Lucknow.
,, P. S. Naidu, Allahabad, University, Allababad.
H. E. Shri K. M. Munshi, Governor of U. P., Lucknow.
Shri A. R. Parchure, Lucknow.
Kumari C. Phillips Lucknow.
Kumari C. R. Pooviah, Principal Crosthwaite Girls' College, Allahabad.
Shri Har Prasad, Principal, D. S. H. Secondary School, Aligarh.
Shri Habib-ur-Rehman, Principal Teachers' Training College, Aligarh.
Kumari Bina Roy, Lucknow University, Lucknow.
Kumari K. Sabarwal, Principal, Mahila Vidyalaya, Lucknow.
Shri A. K. Sanyal, Retd. Deputy Director of Education, Allahabad.
,, Ram Saran, M. P. Moradabad,
,, Shri Har Prasad Seksena, M. P., Lucknow.
,, K. M. Shah, M. P., Uttar Kashi District, Garhwal.
,, Dindayal Sharma, President, U. P. Secondary Education Association.
,, Achal Singh, M. P., Agra.
,, B. P. Singh, Member, Sarvodaya Samaj, Pilibhit.
,, R. K. Singh, Principal, Balwant Rajput College, Agra.
Shrimati S. Singha, Principal Jagat Taran Girls' Inter College, Allahabad.
Shri S B. Singh, Director of Agriculture, Lucknow.
,, M. Hafiz Syed, University of Allahabad, Allahabad.
Thakore Hargovind Singh, Minister of Education, Lucknow.
Shri H. L. Tandon, Principal, G. N. K. College, Kanpur.
Rev. S. Tully, Agra University, Agra.
Shri S. M. Tonki, M. U. High School, Aligarh.
,, R. S. Tripathi, Hindu University, Banaras.
,, M. S. Wadalia, Headquarters National Defence Academy, Dehra Dun.
,, J. N. Wanchoo, Joint Services Wing, Dehra Dun.

Heads of
- Technical Institutions and High Schools, Lucknow.
- Educational Institutions, Allahabad.
- Educational Institutions, Banaras.

Members of
- Faculty of Teachers' Training Section, Balwant Rajput College, Agra.

Officers of the Education Department.

Principals of
- I. T. College, Lucknow.
- Christian College, Lucknow, (including College of Physical Education).
- Champa Agarwal Inter College, Mathura.
- Degree Colleges, Lucknow.
- Mahila Vidyalaya, Lucknow.

Principals of
Teacher Training Colleges, Lucknow.
La Martinieve College, Lucknow.

Representatives of
Allahabad University.
Aligarh University.
Banaras Hindu University.
Lucknow University.
Teachers' Organisations, Lucknow.
Teachers' Organisations, Allahabad.

VINDHYA PRADESH

Shri J. K. Das Gupta, Principal, Durbar College, Rewa.
,, A. P. Mathur, Director of Education, Rewa.
,, A. Mishra, Principal, Maharaja College, Chhatarpur.
,, Arjun Singh, Secretary, Ujjain Anathalaya. Rewa.
,, S. S. Vaidya, Headmaster, V. H. School, Patna.

WEST BENGAL

Shri P. C. Bagchi, Principal Vidya Bhavan, Vishwa Bharati University Shantiniketan.
,, J. N. Banerji, Headmaster, Kidderpore Academy, Calcutta.
,, M. K. Banerjee, Asstt. Secretary, All-India Federation of Educationa Association, Calcutta.
,, P. N. Banerjee, Ex-Vice-Chancellor, Calcutta University.
,, S. N. Banerjee, Vice-Chancellor, Calcutta.
,, K. C. Basu, Secretary, Central Collegiate School, Calcutta.
Kumari M. Bose, Chief Inspectress for Women's Education, Calcutta.
Shri K. Bose, Headmaster, City College School, Calcutta.
,, P. L. Bose, Minister for Education, Calcutta.
Mother M. J. Antonia Bruke, Loreto Convent, Darjeeling.
Shri Srutinath Chakravarty, Tambik, Midnapore.
Shrimati Renu Chakravarty, M. P., Calcutta.
Shri B. C. Chatterjee, Member, All-Bengal Teachers' Association, Calcutta.
,, H. P. Chatterjee, Assistant Master, Hindu School, Calcutta.
,, P. C. Chatterjee, Calcutta.
Rev. S. K. Chatterjee, Formerly Principal, Bishnupur Sikha Sangha.
Shri K. P. Chaudhury, Vinay Bhavan, Vishwa Bharati, Santiniketan.
Shrimati Sita Chaudhury, Calcutta.
Rai Harendra Nath Chowdhury, Ex-Minister of Education.
Shrimati Indira Devi Chaudhurani, Santiniketan.
Shri A. K. Chanda, President, Board of Secondary Education, Calcutta.
,, K. Datkeolyar, Barakar.
,, P. C. Das, Chief Inspector, Secondary Education, Calcutta.
,, S. N. Dutt, Calcutta.
,, R. G. P. S. Fairbairn, Principal, Bengal Engineering College, Howrah.
,, S P. Ganguly, Hony. Secretary, Committee for Moral and Spiritual Instruction in Schools, Mahish Rishra, Hoogly.
,, Jagindranath Ghosh, Vice-President, All-Bengal Teachers' Association, Calcutta.
,, K. D. Ghosh, Principal, David Hare Training College, Calcutta.
,, H. D. Goswami, Retd. Headmaster, E. I., Rly. School, Asansol.
,, P. N. Sen Gupta, Registrar, Indian Institute of Technology, Kharagpur.
,, V. P. Johari, Indian Institute of Technology, Kharagpur.
,, R. C. Majumdar, Ex-Vice-Chancellor, Dacca University, Calcutta.
,, S C. Mitra, Professor of Psychology, Calcutta University.
H. E. Shri H. C. Mukerjee, Governor, West Bengal.
Shri D. M. Mukerjee, Hony. Secretary, West Bengal Headmasters' Association, Calcutta.
,, P. K Pramanik, Editor, "Sikshabrati", Calcutta.
Swami Punyananda, Ramakrishna Mission Boys' Home, Rabana 24, Parganas.
Shri S. P. Roy, All-Bengal Teachers' Association, Calcutta.
,, P. Roy, Director of Public Instruction, Calcutta.
,, Dilipkumar Roy Choudhury, Education Secretary, All-India Students Congress, Calcutta.

Shri A. C. Sen, Chief Inspector, Technical Education, West Bengal.
,, D. M. Sen, Secretary, Education Department.
,, N. K. Sen Registrar, Viswa Bharati University, Santiniketan.
,, P. R. Sen, Calcutta.
,, T. Sen, Principal, College of Engineering & Technology, Jadavpur, Calcutta.
,, J. C. Sen Gupta, Principal, Presidency College, Calcutta.
,, Satyendra N. Sinha, President, TISCO Teachers' Association, Jamshedpur.
,, E. V. Staynor, Inspector of Anglo-Indian Schools, Calcutta.
,, Rathindranath Tagore, Vice-Chancellor, Vishwa Bharati.
,, A. C Ukil, Member, Board of Secondary Education, West Bengal, Calcutta.

Director of Agriculture, Calcutta.
Director of Industries, Calcutta.
Rector St. Xavier's School Department, Calcutta.
Representitives of
- All-Bengal Teachers' Association, Calcutta.
- Bengal Chamber of Commerce.
- Bengal National Chamber of Commerce.
- Board of Secondary Education, Calcutta.
- Calcutta University.
- Headmasters' Association.
- National Council of Education, Bengal.
- Vishwa Bharati.
- Women's Organisation, Calcutta.

APPENDIX V

Number of Recognised Primary, Secondary & Higher Secondary Schools & Intermediate Colleges in India, 1950-51.

State	Number of Schools									Intermediate Colleges
	Pre-Primary	Primary			Middle			High	Higher Secondary	
		Basic	Non-Basic	Total	Basic	Non-Basic	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Assam ...	1	90	10,608	10,698	1	916	917	269	—	2
West Bengal ...	12	86	14,697	14,783	—	1,261	1,261	1,107	—	36
Bihar ...	—	300	23,399	23,699	224	1,948	2,172	643	—	6
Bombay ...	140	16	28,491	28,507	47	333	380	963	—	5
Madhya Pradesh ...	7	—	8,535	8,535	78	757	835	258	—	—
Madras ...	26	407	31,041	38,448	—	282	282	1,117	—	19
Orissa ...	—	136	9,665	9,801	1	501	502	172	—	4
Punjab ...	1	17	4,298	4,315	—	949	949	427	2	—
Uttar Pradesh ...	6	—	31,979	31,979	2,854	—	2,854	—	987	—
Hyderabad ...	1	—	8,805	8,805	—	208	208	130	—	7
Jammu & Kashmir ...	—	—	1,115	1,115	—	139	139	56	—	4
Madhya Bharat ...	20	—	4,172	4,172	—	338	338	50	—	10
Mysore ...	57	101	10,184	10,285	—	711	711	210	—	12
Pepsu ...	—	—	840	840	—	245	245	93	—	2
Rajasthan* ...	—	—	3,195	3,195	—	96	596	153	—	15
Saurashtra ...	19	1	2,409	2,410	—	77	77	52	—	—
Travancore-Cochin ...	8	5	3,963	3,968	—	617	617	466	—	4
Ajmer ...	—	400	—	400	—	39	39	20	—	4
A. & N. Islands ...	—	—	19	19	—	—	—	1	—	—
Bhopal ...	—	—	272	272	—	22	22	5	—	—
Bilaspur ...	—	—	28	28	—	6	6	1	—	—
Coorg ...	3	—	85	85	—	38	38	10	—	1
Delhi ...	—	150	380	530	—	74	74	32	37	—
Himachal Pradesh ...	—	—	402	402	—	85	85	24	—	—
Kutch ...	3	1	265	266	—	12	12	6	—	—
Manipur ...	—	—	455	455	—	71	71	11	—	—
Tripura ...	—	1	403	404	—	40	40	24	—	1
Vindhya Pradesh ...	1	—	1,696	1,696	—	172	172	16	—	1
Grand Total ...	305	1.711	2,08,401	2,10,112	3,205	10,437	13,642	6,316	1,026	133

*Figures relate to the year 1949-50

ENROLMENT IN DIFFERENT STAGES OF EDUCATION, 1950-51.

State	No. of Students in				
	Pre-Primary Stage	Primary Stage	Middle Stage	High Stage	Intermediate Stage
(1)	(2)	(3)	(4)	(5)	(6)
Assam ...	130	6,70,698	1,07,337	43,407	5,293
West Bengal ...	1,673	15,25,518	2,01,536	2,22,536	30,797
Bihar ...	—	14,64,586	2,23,107	1,05,355	12,442
Bombay ...	9,925	29,23,766	6,53,525	2,72,788	27,041
Madhya Pradesh ...	204	7,72,703	1,46,430	41,556	4,461
Madras ...	1,446	38,76,352	6,23,617	2,27,562	27,462
Orissa ...	—	4,85,631	31,074	24,870	3,844
Punjab ...	30	5,66,373	2,00,962	50,005	14,095
Uttar Pradesh ...	4,284	28,18,447	5,02,059	1,32,394	48,887
Hyderabad ...	366	5,90,948	71,398	29,350	4,435†
Jammu & Kashmir...	*	*	*	*	*
Madhya Bharat ...	693	1,98,734	80,313	23,184	4,113
Mysore ...	3,895	6,08,655	1,75,429	54,368	9,971
Pepsu** ...	3	91,600	45,009	12,412	2,181
Rajasthan† ...	119	2,10,293	98,456	17,333	5,872
Saurashtra ...	1,690	1,95,327	47,605	26,377	1,167
Travancore-Cochin**	830	11,76,754	2,07,894	1,08,803	13,589
Ajmer ...	*	*	*	*	*
A. & N. Islands ...	29	1,042	654	47	—
Bhopal ...	30	14,719	2,929	565	167
Bilaspur ...	—	4,080	452	374	—
Coorg ...	74	17,887	4,188	1,565	177
Delhi ...	1,846	1,12,040	41,234	15,310‡	1,196
Himachal Pradesh ...	—	26,027	7,355	1,051	125
Kutch ...	75	16,649	4,311	906	—
Manipur ...	—	33,288	3,850	3,400	165
Tripura ...	—	22,551	4,359	4,162	606
Vindhya Pradesh ...	206	90,432	10,528	1,555	360
Total ...	27,548	1,185,15,100	34,95,631	14,21,035	2,18,446

* Figures are not available.

** Includes students reading in unrecognised schools.

† Figures relate to 1949-50.

‡ Includes students reading in Preparatory Class of Colleges and Class XI of the Higher Secondary Schools.

EXPENDITURE ON SECONDARY* SCHOOLS, 1950-51.

State	Expenditure from				
	Government Funds	Local Board Funds	Fees	Other Sources	Total
(1)	(2)	(3)	(4)	(5)	(6)
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam ...	32,59,476	5,13,347	30,05,435	8,06,448	75,84,706
West Bengal ...	69,79,974	4,82,481	2,18,65,009	41,60,130	3,34,87,594
Bihar ...	57,80,075	43,94,990	99,87,417	21,58,988	2,23,21,470
Bombay ...	1,63,60,281	2,76,738	2,41,78,337	53,13,601	4,61,28,957
Madhya Pradesh...	59,28,127	15,84,221	43,19,445	10,62,575	1,28,95,068
Madras ...	1,24,72,203	41,36,305	2,18,35,569	32,67,364	4,17,11,441
Orissa ...	25,52,657	2,77,358	19,27,907	5,80,345	53,38,267
Punjab ...	72,64,004	21,47,444	80,21,386	18,67,990	1,93,00,824
Uttar Pradesh ...	43,79,095	24,61,594	51,71,927	13,37,284	1,33,49,900
Hyderabad ...	80,56,863	—	11,04,102	6,49,291	98,10,256
Jammu & Kashmir	13,34,684	—	—	—	13,34,684
Madhya Bharat ...	42,49,231	1,060	2,82,879	3,07,064	48,40,234
Mysore ...	46,84,094	4,25,918	17,63,090	4,82,068	73,55,170
Pepsu ...	25,15,795	—	8,64,677	2,62,298	36,42,770
Rajasthan‡ ...	40,60,776	—	—	17,95,942	58,56,718
Saurashtra ...	24,51,035	—	5,29,01	2,88,055	32,68,101
Travancore-Cochin	56,52,414	—	35,50,391	7,91,094	1,09,93,899
Ajmer ...	13,57,526	5,955	2,87,277	74,704	17,25,462
A. & N. Islands ...	70,778	—	5,298	—	76,076
Bhopal ...	4,56,312	—	25,795	—	4,82,107
Bilaspur ...	71,542	—	1,710	—	73,252
Coorg ...	4,35,994	27,403	1,85,753	27,264	6,76,414
Delhi ...	16,14,350	3,08,991	10,53,788	3,28,598	33,05,727
Himachal Pradesh ..	10,99,090	6,639	77,187	11,147	11,94,063
Kutch ...	1,25,878	—	41,564	47,236	2,14,678
Manipur ...	81,344	—	2,51,905	2,95,597	6,28,846
Tripura ...	3,32,422	—	83,360	38,930	4,54,712
Vindhya Pradesh ..	11,26,380	—	2,343	11,943	11,40,657
Total ...	10,47,53,100	1,70,50,444	11,14,22,562	2,59,65,941	25,91,92,053

* Includes High, Senior Basic & Middle Schools.

‡ Figures relate to 1949-50.

Total Direct Expenditure on Schools for General Education & Intermediate Colleges, 1950-51

State	Primary Schools	Middle Schools	High Schools	Higher Secondary Schools	Inter-mediate Colleges
(1)	(2)	(3)	(4)	(5)	(6)
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam ...	65,43,324	25,17,427	50,67.279	—	60,338
West Bengal ...	1,85,17,431	58,21,956	2,76,65,638	—	10,25,590
Bihar ...	1,70 95,128	99,39,979	1,23,81,491	—	28,59,347
Bombay ...	9,67,94,315	33,25,235	4,28,03,722	—	2,37,273
Madhya Pradesh	1,47,88,929	52,19,386	76,75,682	—	—
Madras ...	9,84,35,836	28 59,537	3,88,51,904	—	9,36,883
Orissa ...	62,40,439	21,24,879	32,13,388	—	1,43,629
Panjab ...	94,94,978	73,32.454	1,19,68,370	61,111	—
Uttar Pradesh ...	3,60,67,144	—	1,33,49,900	4,00,25,563	—
Hyderabad ..	1,27,22,028	36,00,461	62,09,795	—	10,48,044*
Jammu & Kashmir	14,99,007	6,69,371	6,65,313	—	1,49,439
Madhya Bharat ...	45,28,414	28,93,052	19,47,182	—	5,03,080
Mysore ...	87,20,891	33,54,793	40.00,377	—	7,54,739
Pepsu ...	9,72,782	16,30,312	20,12,458	5,88,458	70,974
Rajasthan* ...	1,02,04,639	22,20,415	36,36,303	—	8,63,194
Saurashtra ...	54,89,959	11,03,479	21,64,622	—	—
Travancore-Cochin	1,13,85,666	28,75,636	81,18,263	—	3,91,300
Ajmer ...	22,46,675	6,82,290	10,43,172	—	4 99,465
A. & N. Islands ...	53,992	—	76,076	—	—
Bhopal ...	3,70,001	2,70,682	2,11,425	—	—
Bilaspur ...	61,556	40,027	33,225	—	—
Coorg ...	1,14,764	2,47,220	4,29,194	—	1,14,854
Delhi ...	48,52,384	17,56,468	15,49,259	37,39,994	—
Himachal Pradesh	2,72,536	6,63,924	5,30,139	—	—
Kutch ...	5,40,983	93,881	1,20,797	—	—
Manipur ...	3,76,188	2,66,360	3,62,486	—	—
Tripura ...	3,39,045	1,22,079	3,32,633	—	19.895
Vindhya Pradesh	16,10,064	6,99,059	4,41,598	—	66,533
Total ...	37,03,39,098	6,23,30,362	19,68,61,691	4,44,15,126	97,44,577

*Figures relate to 1949-50

APPENDIX VI

NOTE ON AGRICULTURAL EDUCATION IN THE U.S.A.

By Dr. K.R.WILLIAMS

Vocational education in agriculture is a nation-wide federally aided programme of systematic instruction in agriculture and farm mechanics of less-than-college grade, conducted in public schools or classes under a plan of cooperation between State Boards for vocational education and the Office of Education, Federal Security Agency. The programme is for (i) full-time students over 14 years of age who are regularly enrolled in school and who are preparing to become farmers ; (ii) young farmers who have left the regular school and are establishing themselves in farming; (iii) adults who are improving themselves as farmers.

Programme of Instruction : The terms of the National Vocational Education Acts require that this systematic instruction in agriculture shall in every case "provide for directed or supervised practice in agriculture, either on a farm provided for by the school or other farm, for at least six months per year". Instruction is given by teachers who are agriculture college graduates employed on a 12-month basis. These teachers follow up their instruction throughout the year by supervising farming programmes of their students on their home farms. The instruction in vocational agriculture is a combination of instruction in the school and on the home farms of the students and also on other farms in the community. It is an educational programme in which the student learns by doing. The instruction is based on the problems of the student in connection with his directed or supervised farm practice and the farming problems of the home farm and the farms of the community. Problems include the production of farm commodities, marketing of agricultural, products conservation of soil and other agriculture resources, farm shop activities and in many cases the production and conservation of food for home use.

Full-time students who enrol for courses in agriculture in the schools get a general training since they are also required to pursue the regular academic subjects. This entitles them to receive the high-school diploma at the end of the four-year course and to enter a college or university on the same basis as graduates of the regular high-school course. In addition to the vocational agriculture course, the young farmer and the adult farmer may also take other courses that are necessary to build a well-rounded course of training.

Supervised Projects : Statistics compiled by State Boards for Vocational Education show that students attending vocational agriculture classes in rural high schools are learning valuable lessons in farming through their supervised farm practice. Agricultural projects are set up with the cooperation of the teacher and the student. These projects are based on the farming enterprises best suited to agricultural conditions not only on the home farm of the student, but also on the farms of the community. Furthermore, they are planned on a long-time basis and in such a way as to fit into the permanent farming activities of the student. The supervised practice of agricultural student has been instrumental in influencing students to adopt improved practices on their own farms and to assist in getting improved practices adopted by other farms in the community. It is a common thing for a student to earn enough money through his supervised projects to start farming and to remain established on a productive and profitable basis.

Perhaps the best way to illustrate the value of vocational agriculture training for students enrolled in all-day, young farmer, and adult farmer, classes is to show what has resulted in an individual case.

Examples of Accomplishment : The example may be cited of the full-time day school student in one of the vocational agriculture departments. With the help of the teacher and the cooperation of the student's father, this boy made a survey of his home farm to determine soil types and the types of farming enterprises followed, and analyzed the market demands for the crops raised as well as the method of getting them to market His supervised practice work was then planned on the basis of the fact revealed by the study. As hog raising was the major farm enterprise, the student started his farm practice programme with a sow and litter project. So successful was he with this project that he was able

to produce a ton litter (that is a litter of pigs, regardless of number, which weighed 2,000 pounds at the end of 6 months) each year for 4 years. The farm survey indicated that he should have a feed crop. As his second project, he selected the raising of corn, which is an economical feed crop and adapted to soil and climatic conditions in his area. Other enterprises—beef, cattle, sheep, oats and wheat production—became a part of a well-planned and balanced supervised practice programme carried on by this young man. Eventually, he purchased land of his own and formed a partnership with his father in the operation of the home farm and several additional acres of land. This young farmer, whose programme of instruction in vocational agriculture—both theoretical—was based on actual conditions on his home farm and on community farms, has won wide recognition in the markets to which he sends his products as an outstanding producer of hogs and other farm products.

Leadership Experience : Members of the Future Farmers of America, the national organization of the all-day vocational agriculture students are acquiring leadership ability through their own thrift banks ; they are learning the principles of parliamentary procedure and are taking part in public-speaking contests which teach them to speak on the public platform Through these activities and many others and through the instructions in the vocational agriculture classes, they are developing into competent and successful farmers and are acquiring attributes of character and citizenship which will enable them to take their places eventually as substantial members of society in general and of their communities in particular.

APPENDIX VII

Specimen Form of Cumulative Record

[Entries should be made at the end of each year by the class teacher in consultation with the other teachers who come into contact with the pupil. The entries in the Cumulative Record should normally be the grade in each item on the five point scale supplemented wherever necessary with verbal remarks.]

Name of Pupil.
Date of Birth.
Name of Parent.
Occupation of Parent or Guardian.
Address of Parent or Guardian.
School History.
Name of School studied Year Reasons for Transfer.
Family History : Position of child in Family
Family Discipline.
Home Circumstances
Pupil's Ambitions Parent's desire regarding career.

A. SCHOLASTIC ATTAINMENTS

	19		19		19	
Subjects	*Grade*	*Remarks*	*Grade*	*Remarks*	*Grade*	*Remarks*
1. First Language						
2. School Language						
3. English						
4. Mathematics						
5. Science						
6. Social Studies						
7. Bifurcated Course ( )						

B. ACTIVITIES (PRACTICAL)

	19		19		19	
Subjects	*Grade*	*Remarks*	*Grade*	*Remarks*	*Grade*	*Remarks*
1. Craft ( ) :						
(a) Turnover						
(b) Craftsmanship						
(c) Application						
Total Grading						

Subjects	Grade	19 Remarks	Grade	19 Remarks	Grade	19 Remarks
2. Social and Citizenship Activities :						
(a) Collections						
(b) Expression						
(c) Service						
(d) Proficiency Batches						
(e) Team spirit						
Total Grading						

Subjects	Grade	Remarks 19	Grade	Remarks 19	Grade	Remarks 19
3. Physical Education :						
(a) Physical Efficiency						
(b) Participation in Games, etc.						
Total Grading						

Subjects	Grade	Remarks 19	Grade	Remarks 19	Grade	Remarks 19
4. Drawing and Painting ;						
(a) Technique						
(b) Expression						
(c) Originality						
Total Grading						
5. Music :						
6. Dancing :						

C. HEALTH REPORT

	19	19	19
Height			
Chest Expanded			
Normal			
Contracted			
Medical Officer's report			

D. PERSONALITY TRAITS*

	19	19	19	19	19	19
Initiative						
Integrity						
Persistence						
Leadership						
Self-confidence						
Emotional control						
Social Attitude						

*Note :—It is desirable that wherever possible the entries for each item may be clarified with details as below :

e.g., Leadership .... Sports field A
Social Activities A
Intellectual B
Persistence.................. Craft A
Mathematics C
Physical Activities B

E. GENERAL REMARKS

	19	19	19	19	19
1. Position of responsibility held					
2. Special remarks					
3. Signature of Classmaster.					
4. Signature of Headmaster.					

GUIDE TO THE ASSESSMENT OF PERSONALITY TRAITS

PERSONALITY TRAITS.	A	B	C	D	E
Initiative	Shows marked originality & independence.	Willing to take initiative.	Quite inventive, able to take initiative.	On the whole unenterprising.	Very Dependent on others, diffident.
Integrity (Moral Sense.)	Completely trustworthy under all circumstances	Of superior dependability, Honest in face of punishment.	Usually dependable.	Questionable at times.	Positively dishonest.
Persistence (State in chart in which situations).	Very Presistent.	Not easily stopped	Works quite steadily.	Somewhat changeable, restless.	Gives up easily.
Leadership (State in chart in which situations).	Much drive, Mild, Impressive, steady, or convincing, wide influence, Acceptable to group, sought after by the group and takes the group with him.	Ready to take the lead. Works quietly for leadership; accepts responsibility.	Sometimes leads in minor affairs.	Satisfied to have others lead.	Probably unable to lead his fellows.
Self-Confidence (Poise).	Very Self-confident, Very resourceful, Willing to take reasonable risks.	Self-confident, Trusts his own ability, well adjusted to others.	Normally confident in familiar circumstances. Does not need special assurance.	Cannot work for long without demanding attention or responds after special encouragement.	Always draws attention to self. Afraid of being overlooked or afraid to open out in presence of others, very nervous.
Emotional control	Unusual balance of responsiveness or control.	Well-balanced.	Usually well-balanced	Tends to be over-emotional.	Too easily moved to anger and fits of depression.
Social attitude	Strongly altruistic. Greater aesthetic sensibility.	Usually considerate of others. Aesthetic sensibility.	Has no positive attitude, neutral. Conscious of his rights and those of others or indifferent.	Self-centred.	Anti-social.

Collective summary in form of a pen picture

SPECIMEN OF PROGRESS REPORT

..................School, ...State. *Student..*

No.	Subject	Std.								
		Year								
1.	English									
2.	Gujarati									
3.	Hindi									
4.	Second Language (French, Persian, Sanskrit)									
5.	Arithmetic									
	Algebra									
	Geometry									
	Total									
6.	Science N. Study Phy. & Ch. Phy. & Hyg.									

No.	Subject								
7.	History								
8.	Geography								
9.	General Knowledge								
10.	Spelling (English)								
11.	Spelling (Gujarati)								
12.	Art								
13.	Music								
14.	Handicraft Needle Work etc.								
15.	Physical Education								
	Class Teacher								

CHILD STUDY

........................School,......................State.   Student..................................

		Std.							
		Year							
1.	Progress in Studies	Strong in							
		Weak in							
		Sp. Interest in							
2.	Games & Sports	Attitude to Play							
		Favourite Games							
		& Sports							
3.	Fine Arts & Crafts								
	Music, Painting, Dancing, Modelling, Knitting & Needle Work, Any other handicraft.								
4.	Extra-Curricular Activities								
	(a) Debate, Elocution, Dramatics								
	(b) Cubbing, Scouting, First Aid								
	(c) Literary Activities, Journalism								
	(d) Social Work (e) Any other Activity.								
5.	General Knowledge								

6.	Hobbies and Interests (a) Reading. (b) Leisure occupations collection, photography, sight seeing, hiking, swimming etc.							
7.	Personal Characteristics							
	1. Industry							
	2. Leadership							
	3. Self-Confidence							
	4. Re liability							
	5. Orderliness							
	6. Punctuality							
	7. Sociability							
	8. Concern for others							
	9. Politeness							
	10. Adaptability							
	General Remarks							
	Class Teacher							

APPENDIX VIII

SECONDARY SCHOOL-LEAVING CERTIFICATE

(Issued under the Authority of Government of Madras)

Issued by....................................
Station.......................................
Dated...

Serial Number..............................
Signature.....................................
Designation..................................

1. Name of the Pupil (in full)
2. Nationality, Religion and Caste
3. Sex
4. Date of Birth (in words)
5. Father's Name
6. Personal Marks of Identification :
   1.
   2.
7. Nature of the Course :
8. School History — Name of School. Period of Study. Form of Forms.

Headmaster.
Headmistress.

Note :—Erasures and unauthenticated or fraudulent alterations in the certificate will lead to its cancellation.

S.S.L.C. PUBLIC EXAMINATION

NAME..NO..............................

Serial No.	*Subjects*	*Marks at the Public Examination (in figures and words)*	*Presidency Average*
1.	Regional Language	....	....
2.	Second Language	....	....
3.	English	....	....
4.	Elementary Mathematics	....	....
5.	General Science	....	....
6.	Social Studies	....	....
7.	Algebra & Geometry	....	....
8.	....	....	....
9.	....	....	....
10.	....	....	....
11.	....	....	....
12.	....	....	....
13.	....	....	....
14.	....	....	....

Signature of the Headmaster
Headmistress

School :

Date..................

Secretary of the Board of Secondary Education.

SCHOOL RECORD

NAME	FORM	YEAR

Subjects	*Percentage of Marks*	*Form Average*
1. Regional Language	1.	....
2. Second Language	2.	....
3. English	3.	....
4. Elementary Mathematics	4.	....
5. General Science	5.	....
6. Social Studies	6.	....
7. Art/Domestic Science/Craft	7.	....
8.	8.	....
Diversified Courses:		
9.	9.	....
10.	10.	....
11.	11.	....
12.	12.	....

Remarks:

Skill in Practical Activities

1. Craft Training ....
2. Social Activities ....
3. Laboratory ....
4. Handwriting ....
5. Conduct ....

Attendance	*First Term*	*Second Term*
Number of School Days	....	....
Number of Days Attended	....	....
Percentage	....	....

1. Signature of Pupil........
2. Signature of Headmaster/Headmistress (with date) ....

School........

SCHOOL RECORD

FORM	YEAR	FORM	YEAR

Percentage of Marks	Form Average	Percentage of Marks	Form Average
1. ……	……	……	……
2. ……	……	……	……
3. ……	……	……	……
4. ……	……	……	……
5. ……	……	……	……
6. ……	……	……	……
7. ……	……	……	……
8. ……	……	……	……
9. ……	……	……	……
10. ……	……	……	……
11. ……	……	……	……
12. ……	……	……	……

1. Craft Training……	1. Craft Training……
2. Social Activities……	2. Social Activities……
3. Laboratory Work……	3. Laboratory Work……
4. Hand-writing ……	4. Hand-writing ……
5. Conduct……	5. Conduct ……

First Term	*Second Term*	*First Term*	*Second Term*
……	……	……	……
……	……	……	……
……	……	……	……

I……	I……
II……	II……
School……	School……

SCHOOL RECORD

	FORM	YEAR	FORM	YEAR
Attendance :				
1. Number of Days Attended	....	....	....	....
2. Percentage	....	....	....	....
Physical Measurements :				
3. Height	....	....	....	....
4. Weight	....	....	....	....
5. Chest Expanded	....	....	....	....
6. „ Contracted	....	....	....	....
7. „ Normal	....	....	....	....

Boys	*Girls*	*Record*	*Grade*	*Record*	*Grade*
8. Pull Ups	50 Meter Race	....	....	....	....
9. High Jump	Net-ball Throw	....	....	....	....
10. Long Jump	No. of Skip in 30 sec.	....	....	....	....
11. Cricket Ball Throw	Balance Walk	....	....	....	....
12. 100 Meter Race	Skill in Folk Dance	....	....	....	....

Special Distinctions :		
13. Team Games	....	....
14. Track and Field Games	....	....
15. Other Physical Activities	....	....
	Headmaster / *Headmistress*	*Headmaster* / *Headmistress*

PHYSICAL EDUCATION RECORD

FORM	YEAR	FORM	YEAR	FORM	YEAR	FORM	YEAR
1.		....		....		....	
2.		....		....		....	
3.		....		....		....	
4.		....		....		....	
5.		....		....		....	
6.		....		....		....	
7.		....		....		....	

Record	*Grade*	*Record*	*Grade*	*Record*	*Grade*	*Record*	*Grade*
8.	....	....	....	....	....	....	....
9.	....	....	....	....	....	....	....
10. ...	....	....	....	....	....	....	....
11.	....	....	....	....	....	....	....
12.	....	....	....	....	....	....	....
....		....		....		....	
13.		....		....		....	
14.		....		....		....	
15.		....		....		....	
		Headmaster *Headmistress*		*Headmaster* *Headmistress*		*Headmaster* *Headmistress*	

APPENDIX IX

SCHEME REGARDING PENSION-CUM-PROVIDENT FUND-CUM-INSURANCE

Facilities available for teachers with regard to Pension, Provident Fund, etc., vary from State to State and from Management to Management which may be classified under three categories :

(*a*) Government

(*b*) Local Body

(*c*) Private

(*a*) *Government* : Teachers in Government service come under the rules governing Government servants and are eligible for Pension and Provident Fund in accordance with the rules applicable to Government servants.

(*b*) *Local Body* : Teachers employed by local bodies are normally not eligible for pension, but to the contributory provident fund to which the subscriber makes a subscription of 6¼% of his salary, the local body contributing a like sum. No other benefits are given for teachers.

(*c*) *Private Managements* : With regard to private managements the benefits of contributory provident fund are available in some cases. In some States special rules governing providend funds for aided teachers have been framed by which the teacher subscribes 6¼% of his salary, the Management and the State con tributing together an equal amount.

In one State a system of Pension-cum-Provident Fund-cum-Insurance has recently been introduced. The Commission recommends that a similar system should be introduced for the benefit of teachers in all States, According to this scheme, the employee is entitled to the following benefits :

(*a*) *Contributory Provident Fund* : To this an employee can subscribe not less than 6¼% of his salary subject to a maximum of about 15%, the State contributing at the rate of nine pies per rupee (three-fourths of an anna) as its share.

(*b*) *Pension* : Pension equal to one-fourth of the average emoluments during the last three years of service for approved service of not less than 25 years or a pro-rata pension for service of more than 15 years and less than 25 years ; this is arrived at by multiplying the salary by the number of years and dividing it by 120,

(*c*) *Insurance* : An employee shall keep himself insured for a sum which should be not less than Rs 500 and not more than Rs.5,000 depending on the scale of salary drawn by him.

It would appear from the above that the Government roughly compute the capital value of an employee's pension for a sum which would stand to his credit by way of contribution to Provident Fund at the rate of nine pies (three-fourth of an anna) per rupee of salary.

The following scheme is therefore suggested:

Every teacher employed permanently in an institution shall be entitled to Pension-cum-Provident Fund-cum-Insurance.

(*i*) *Pension* : Pension shall be one-fourth of average emoluments during the last three years of service and the amount of pension that may be granted shall be determined by the length of service.

The amount of pension shall be regulated as follows :

Years of Completed Service.	*Scale of Pension*
15 ...	15/one hundred and twentieths of average emoluments.
16 ...	16 " " " " "
17 ...	17 " " " " "
18 ...	18 " " " " "
19 ...	19 " " " " "
20 ...	20 " " " " "
21 ...	21 " " " " "
22 ...	22 " " " " "
23 ...	23 " " " " "
24 ...	24 " " " " "
25 and above	30 " " " " "

For purposes of payment of pension, there shall be established a pension Fund which shall be administered by Government through the Director of Public Instruction.

Every Management shall subscribe to the Pension Fund Account of every permanent teacher in its employ a sum calculated at the rate of 9 pies per rupee of salary drawn by the teacher. This amount shall be funded up monthly and shall be invested by the Director of Public Instruction and kept as a Pension Fund Account, out of which every teacher who is entitled to the benefit shall be paid the pension due to him on superannuation.

(*ii*) *Provident Fund*: Every teacher employed shall subscribe to a contributory Provident Fund.

Every subscriber shall subscribe monthly to the fund an amount not less than 6¼% (i.e. one-anna in the rupee) of his pay, or leave salary, but not exceeding 12½% (i.e two annas in the rupee) of his pay or leave salary, the amount of subscription being fixed yearly by the subscriber himself.

The subscriber shall intimate the fixation of the amount of his monthly subscription in whole rupees before the end of the preceding year, except during the year when the first elects to come under this scheme.

A teacher may, at this option, not subscribe during leave. He shall intimate his election not to subscribe during the leave by written communication to the head of the institution before he proceeds on leave. The option of a subscriber intimated under this clause shall be final. Failure to make due and timely intimation shall be deemed constitute an election to subscribe.

This amount shall be subscribed monthly by every subscriber. It shall be the duty of the management to maintain an account of subscription by each teacher under its employ. This amount shall be invested either in Post-Office Savings Bank Account as at present, or in National Savings Certificate or in Government Securities as may be decided. The Government shall contribute to the Provident Fund Account of each teacher at the rate of nine pies in the rupee of the actual pay or leave salary drawn by him. The amount of contribution payable by the Government shall be calculated at the end of each year and credited to the subscribers' account or may be calculated on the retirement of the teacher or death or on leaving the service of the incumbent and credited to his account.

The Government contribution and the interest thereon shall be payable in full in the following cases :

(*a*) If the subscriber retires after completing 15 years' service in the institution ;

(*b*) If he retires on account of certified incapacity, or such incapacity having arisen from causes beyond his control ; or

(*c*) If his services are terminated as the result of a reduction in the establishment of the institution or abolition of his post ; or

(*d*) If he dies.

For a service of more than 10 years but less than 15 years the share of Government contribution and interest payable shall be calculated according to the following table :

On the completion of 10 years' service	... ...	10/15ths.
11 " "	... ...	11/15ths.
12 " "	... ...	12/15ths.
13 " "	... ...	13/15ths.
14 " "	... ...	14/15ths.

(*iii*) *Insurance* : Every teacher who has been confirmed shall insure his life with Postal Life Insurance or Private Life Insurance Companies or under such group Insurance as may be arranged by each Management for the minimum amounts specified below :

	Sum Insured Rs.
(1) If his pay is less than Rs. 45	500
(2) If his pay is Rs. 45/- and above but does not exceed Rs. 90/-	1,000
(3) If his pay exceeds Rs. 90/- but does not exceed Rs. 150/-	2,000
(4) If his pay exceeds Rs. 150/- but does not exceed Rs. 250/-	3,000
(5) If his pay exceeds Rs. 250/-	5,000

Provided that a person who has already taken out an Insurance Policy or who is rejected for insurance as a bad life or who has completed the age of 40 shall be exempted from this insurance.

Such compulsory insurance shall be taken by a teacher within an year of his coming under these rules ; and in the case of a teacher who is promoted from one grade to another, he shall take such additional insurance policy as may be necessary for his higher emoluments within 6 months of such substantive promotion. (For failure to comply with these conditions, he shall be liable to disciplinary action).

A policy taken under these rules may be assigned to any member of the subscriber's family but not to any one else as a gift or for value received. Such a policy shall not also be mortgaged.

The policy taken under these rules shall be Whole Life Policy with limited payments or an Endowment Policy for limited period provided that the amount of insurance is payable only on or after the date of his attaining superannuation or at his death, whichever is earlier.

The policy shall not be allowed to lapse or forfeiture by non-payment of any premium due and the policy shall be kept alive and evidence of its being kept alive and unencumbered shall be produced before the head of the institution.

In the event of the Management arranging the scheme of Group Insurance, the premium due and the company or companies under such scheme from the members of the Fund on their policies shall be deducted from their monthly salaries and remitted to the Insurance Company or Companies.

APEPNDIX X

TEXT OF THE NATIONAL VOCATIONAL EDUCATION (SMITH-HUGHES) ACT

SECTION I

(*Public Law No. 347, Sixty-fourth Congress—S. 703*)

AN ACT to provide for the promotion of vocational education to provide for co-operation with the States in the promotion of such education in agriculture and the trades and industries ; to provide for co-operation with the States in the preparation of teachers of vocational subjects ; and to appropriate money and regulate its expenditure.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled that there is hereby annually appropriated out of any money in the Treasury not otherwise appropriated, the sums provided in section two, three and four of this act. to be paid to the respective States for the purpose of cooperating with the States in paying the salaries of teachers supervisors, and directors of agricultural subjects and teachers of trade home economies, and Industrial subjects and in the preparation of teachers of agriculture, trade, industrial, and home economies subjects ; and the sum provided for in section seven for the use of the Federal Board for Vocational Education for the administration of this act and for the purpose of making studies, investigations, and reports to aid in the organization and conduct of vocational education, which sums shall be expended as hereinafter provided.

Section 2. That for the purpose of cooperating with the States in paying the salaries of teachers, supervisors, or directors of agricultural subjects there is hereby appropriated for the use of the States, subject the provisions of this act for the fiscal year ending June thirtieth, nineteen hundred and eighteen, the sum of $500,000 ; for the fiscal year ending June thirtieth, ninteen hundred and nineteen the sum of $750,000 ; for the fiscal year ending June thirtieth, ninteen hundred and twenty the sum of $1,000,000 ; for the fiscal year ending June thirtieth. nineteen hundred and twenty-one, the sum of $1,250 000 ; for the fiscal year ending June thirtieth. nineteen hundred and twenty-two, the sum of $1,500,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-three the sum of $1,75,0.000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-four, the sum of $2,000.000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-five. the sum of $2,500,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-six, and annually thereafter, the sum of $3,000,000. Said sums shall be allotted to the States in the proportion which their rural population bears to the total rural population in the United States, not including outlying possessions, according to the last preceding United States census, *Provided,.................*

Section 3. That for the purpose of cooperating with the States in paying the salaries of teachers of trade, home economics, and industrial subjects there is hereby appropriated for the use of the States, for the fiscal year ending June thirtieth, nineteen hundred and eighteen, the sum of $500,000 ; for the fiscal year ending June thirtieth, nineteen hundred and nineteen, the sum of $750,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty, the sum of $1,000.000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-one, the sum of $1,250,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-two, the sum of $1,500,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-three, the sum of $1750,000 ; for the fiscal year ending June thirtieth nineteen hundred and twenty-four, the sum of $2, 000.000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty-five the sum of $2,500.000 ; for the fiscal year ending June thirtieth, ninteen hundred and twenty-six, the sum of $3,000,000 ; and anuually thereafter the sum of $3,000.000. Said sum shall be allotted to the States in the proportion which their urban population bears to the total urban population in the United States, not including outlying possessions, according to the last proceeding United States census. *Provided,................*

That not more than twenty per centum of the money appropriated under this act for the payment of salaries of teachers of trade, home economics, and industrial subjects for any year, shall be expended for the salaries of teachers of home economics subjects.

Sectoin 4. That for the purpose of cooperating with the States in preparing teachers, supervisors, and directors of agricultural subjects and teachers of trade and industrial and home economics subjects there is hereby appropriated for the use of the States for the fiscal year ending June thirtieth nineteen hundred and eighteen, the sum of $ 500,000 ; for the fiscal year ending June thirtieth, nineteen hundred and nineteen, the sum of $ 700,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty the sum of $ 900,000 ; for the fiscal year ending June thirtieth, nineteen hundred and twenty one, and annually thereafter, the sum of $ 1,000,000. Said sums shall be allotted to the States in the proportion which their population bears to the total population of the United States, not including outlying possessions, according to the last preceding United States census : *Provided*, ...

Section 5. That in order to secure the benefits of the appropriations provided for in sections two, three, and four of this Act, any State shall, through the legislative authority thereof, accept the provisions of this Act and designate and create a State Board, consisting of not less than three members, and having all necessary power to cooperate, as herein provided, with the Federal Board for Vocational Education in the administration of the provisions of this Act. The State Board of Education, or other Board having charge of the administration of public education in the State, or any State Board having charge of the administration of any kind of vocational education in the State may, if the State so elects, be designated as the State Board, for the purposes of this Act.

In any State the legislature of which does not meet in nineteen hundred and seventeen, if the Governor of that State, so for as he is authorized to do so, shall accept the provisions of this Act and designate or create a State Board of not less than three members, to act in cooperation with the Federal Board for Vocational Education, the Federal Board shall recognize such local board for the purpose of this Act until the legislature of such State meets in due course and has been in session sixty days.

Any State may accept the benefits of any one or more of the respective funds herein appropriated and it may defer the acceptance of the benefits of any one or more of such funds, and shall be required to meet only the conditions relative to the fund or funds the benefits of which it has accepted. *Provided*, That after June thirtieth, nineteen hundred and twenty, no State shall receive any appropriation for salaries, of teachers, supervisiors, or directors of agricultural subjects, until it shall have taken advantage of at least the minimum amount appropriated for the training of teachers, supervisors, or directors of agricultural subjects, as provided for in this act, and that after said date no State shall receive any appropriation for the salries of teachers of trade, home economics, and industrial subjects until it shall have taken advantage of at least the minimum amount appropriated for the training of teachers of trade, home economics, and industrial subjects, as provided for in this Act.

Section 6. That a Federal Board for Vocational Education is hereby created, to consist of the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Labor, the United States Commissioner of Education, and three citizens of the United States to be appointed by the President, by, and with the advise and consent of the Senate. One of said three citizens shall be a representative of the manufacturing and commercial interests, one a representative of the agricultural interests, and one a representative of labor. The board shall elect annually one of its members as Chairman. In the first instance, one of the citizen members shall be appointed for one year, one for two years, and one for three years, and thereafter for three years each. The members of the Board other than the members of the Cabinet and the United States Commissioner of Education shall receive a salary of $5,000 per annum.

The Board shall have power to cooperate with State Boards in carrying out the provisions of this Act. It shall be the duty of the Federal Board for Vocational Education to make, or cause to have made studies, investigations, and reports,

particular reference to their use in aiding the States, in the establishment of vacational schools and classes and in giving instruction in agriculture, trades, and industries commerce and commercial pursuits, and home economics, Such studies, investigations, and reports shall include agriculture and agricultural processes and requirements upon agricultural workers; trades, industrial workers, and apprenticeships, trade and industrial processes and pursuits; commerce and commercial pursuits and requirements upon commercial workers; home management, domestic science, and the study of related facts and principles; and problems of administration of vocational schools and of courses of study and introduction in vocational subjects.

When the Board deems it advisable such studies, investigations, and reports concerning agriculture, for the purposes of agricultural education, may be made in cooperation with or through the Department of Agriculture; such studies, investigation, and reports, concerning trades and industries for the purposes of trades and reports ooncerning commerce and commercial pursuits, for the purposes of commercial education, may be made in cooperation with or through the Department of Commerce; such studies, investigations, and reports concerning the administration of vocational schools, courses of study, and instruction in vocational subjects may be made in cooperation with or through the Bureau of Edueation.

The Commissioner of Education may made such recommendations to the Board relative to the administration of this act as he may from time to time deem advisable. It shall be the duty of the Chairman of the Board to carry out the rules, regulations, and decisions which the Board may adopt. The Federal Board for Vocational Education shall have power to employ such assistants as may be necessary to carry out the provisions of this Act.

Section 7. That there is hereby appropriated to the Federal Board for Vocational Education the sum of $2,00,300 annually, to be available from and after the passage of this act, for the purpose of making or cooperating in making the studies, investigations, and reports provided for in section six of this Act, and for the purpose of paying the salaries of the officers, the assistants, and such office and other expenses as the Board may deem necessary to the execution and administration of this Act.

Seetion 8. That in order to secure the benefits of the appropriation for any purpose specified in this Aet, the State Board shall prepare plans, showing the kinds of vocational education for which it is proposed that the appropriation shall be used; the kinds of schools and equipment; courses of study; methods of instruction; qualifications of teachers; and, in the case of agricultural subjects the qualifications of supervisors or directors; plans for the training of teachers; and, in the case of agricultural subjects, plans for the supervision of agricultural education, as provided for in section ten. Such plans shall be submitted by the State Board to the Federal Board for Vocational Education, and if the Federal Board finds the same to be in conformity with the provisions and purposes of this act, the same shall be approved. The State Board shall make an annual report to the Federal Board for Vocational Education, on or before September first of each year, and on the work done in the State and the receipts and expenditures of money under the provisions of this Act.

Section 9. That the appropriation for the salaries of teachers, suppervisros, or directors of agricultural subjects and of teachers of trade, home economics, and industrial subjects shall be devoted exclusively to the payment of salaries, of such teachers, supervisors or directors having the minimum qualifications set up for the State by the State Board, with the approval of the Federal Board for Vocational Education. The cost of instruction supplementary to the instruction in agriculture and in trade, home economics, and industrial subjects provided for in this Act, necessary to build a well-rounded course of training, shall be borne by the State and local communities, and no part of the cost thereof shall be borne out of the appropriation herein made. The moneys expended under the provisions of the Act, in cooperation with the States, for the salaries of teachers, supervisors, or directors of agricultural subjects or for the salaries of teachers

---

*Name changed to Office of Education, October 3, 1929.

of trade, home economics, and industrial subjects shall be conditioned that for each dollar of Federal money expended for such salaries the State or local community, or both, shall expend an equal amount for such salaries; and that appropriations for the training of teachers of vocational subjects, as herein provided, shall be conditioned that such money be expended for maintenance of such training and for each dollar of Federal money so expended for maintenance, the State or local community or both shall expend an equal amount for the maintenance of such training.

Section. 10. That any state may use the appropriations for agricultural purposes, or any part thereof allotted to it, under the provisions of this act, for the salaries of teachers, supervisors or directors of agricultural subjects, either for the salaries of teachers of such subjects in schools or classes or for the salaries of supervisors or directors of such subjects under a plan of supervision for the State to be set up by the State Board, with the approval of the Federal Board for Vocational Education. That in order to receive the benefits of such appropriations for the salaries of teachers, supervisors, or directors of agricultural education; that such education shall be that which is under public supervision or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and be designated to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home; that the State or local community, or both, shall provide the necessary plant and equipment determined upon by the State Board, with the approval of the Federal Board for Vocational Education, as the minimum requirement for such education in schools and classes in the State; that the amount expended for the maintenance of such education in any school or class receiving the benefit of such appropriation shall not be less annually than the amount fixed by the State, Board, with the approval of the Federal Board as the minimum for such schools or classes in the State; that such schools shall provide for directed or supervised practice in agriculture either on a farm provided for by the school or other farm, for at least six months per year; that the teachers, supervisors, or directors of agricultural subjects shall have at least the minimum qualifications determined for the State by the State Board, with the approval of the Federal Board for Vocational Education.

Section 11. That in order to receive the benefits of the appropriations for the salaries of teachers of trade, home economics, and industrial subjects the State Board of any State shall provide its plans for trade, home economics, and industrial education; that such education shall be given in schools or classes under public supervision or control; that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and shall be designed to meet the needs of persons over fourteen years of age who are preparing for a trade or industrial pursuit or who have entered upon the work of a trade or industrial pursuit; that the State or local community or both shall provide the necessary plant and equipment determined upon by the State Board, with the approval of the Federal Board for Vocational Education, as the minimum requirement in such State for education for any given trade or industrial pursuit; that the total amount expended for the maintenance of such education in any school or class receiving the benefit of such appropriation shall be not less annually than the amount fixed by the State Board, with the approval of the Federal Board as the minimum for such schools or classes in the State; that such schools or classes giving instruction to persons who have not entered upon employment shall require that at least half of the time of such instruction be given to practical work on a useful or productive basis, such instruction to extend over not less than nine months per year and not less than thirty hours per week; that at least one-third of the sum appropriated to any State for the salaries to teachers of trade, home economics, and industrial subjects shall, if expended, be applied to part-time schools or classes for workers over fourteen years of age who have entered upon employment and such subjects in a part-time school or class may mean any subject given to enlarge the civic or vocational intelligence of such workers over fourteen and less than eighteen years of age; that such part-time schools or classes shall provide for not less than one hundred and forty-four hours of class-room instruction per year; that evening industrial schools shall fix the age of sixteen years as a minimum entrance requirement and shall confine instruction to that which is supplemental to the daily employment; that the teachers of any trade

or industrial subject in any State shall have at least the minimum qualifications for teachers of such subject determined upon for such State by the State Board, with the approval of the Federal Board Vocational Education: *Provided*, that for cities and towns of less than twenty-five thousand population, according to the last preceding United States census, the State Board, with the approval of the Federal Board for Vocational Education, may modify the conditions as to the length of course and hours of instruction per week for schools and classes giving instruction to those who have not entered upon employment, in order to meet the particular needs of such cities and towns.

Section 12. That in order for any State to receive the benefits of the appropriation in this Act for the training of teachers, supervisors, or directors of agricultural subjects, or of teachers of trade, industrial or home economics subjects, the State Board of such State shall provide in its plan for such training that the same shall be carried out under the supervision of the State Board; that such training shall be given in schools or classes under public supervision or control; that such training shall be given only to persons who have had adequate vocational experience or contact in the line of work for which they are preparing themselves as teachers, supervisors, or directors, or who are acquiring such experience or contact as a part of their training; and that the State Board, with the approval of the Federal Board shall establish minimum requirements for such experience or contact for teachers, supervisors or directors of agricultural subjects and for teachers of trade, industrial, and home economics subjects; that no more than sixty per centum nor less than twenty per centum of the money appropriated under this Act for the training of teachers of Vocational subjects to any State for any year shall be expended for any one of the following purposes: For the preparation of teachers, supervisors, or directors of agricultural subjects, or the preparation of teachers, of trade and industrial subjects, or the preparation of teachers of home economics subjects.

Section 13. That in order to secure the benefits of the appropriations for the salaries of teachers, supervisors, or directors of agricultural subjects, or for the salaries of teachers of trade, home economics, and industrial subjects, or for the training of teachers as herein provided, any State shall, through the legislative authority thereof, appoint as custodian for said appropriations its State treasurer, who shall receive and provide for the proper custody and disbursement of all money paid to the State from said appropriations.

Section 14. That the Federal Board for Vocational Education shall annually ascertain whether the several States are using, or are prepared to use the money received by them in accordance with the provisions of this Act. On or before the first day of January of each year the Federal Board for Vocational Education shall certify to the Secretary of the Treasury of each State which has accepted the provisions of this act and complied therewith, certifying the amounts which each State is entitled to receive under the provisions of this act. Upon such certification the Secretary of the Treasury shall pay quarterly to the custodian for vocational education of each State the moneys to which it is entitled under the provisions of this Act. The moneys so received by the custodian for vocational education for any State shall be paid out on the requisition of the State Board as reimbursement for expenditures already incurred to such schools as are approved by said State Board and are entitled to receive such moneys under the provisions of this act.

Section 15. That whenever any portion of the fund annually allotted to any State has not been expended for the purpose provided for in this Act, a sum equal to such portion shall be deducted by the Federal Board from the next succeeding annual allotment from such fund to such State.

Section 16. That the Federal Board of Vocational Education may withhold the allotment of moneys to any state whenever it shall be determined that such moneys are not being expended for the purposes and under the conditions of this Act.

If any allotment is withheld from any State, the State Board of such State may appeal to the Congress of the United States, and if the Congress shall not direct such sum to be paid, it shall be covered into the Treasury.

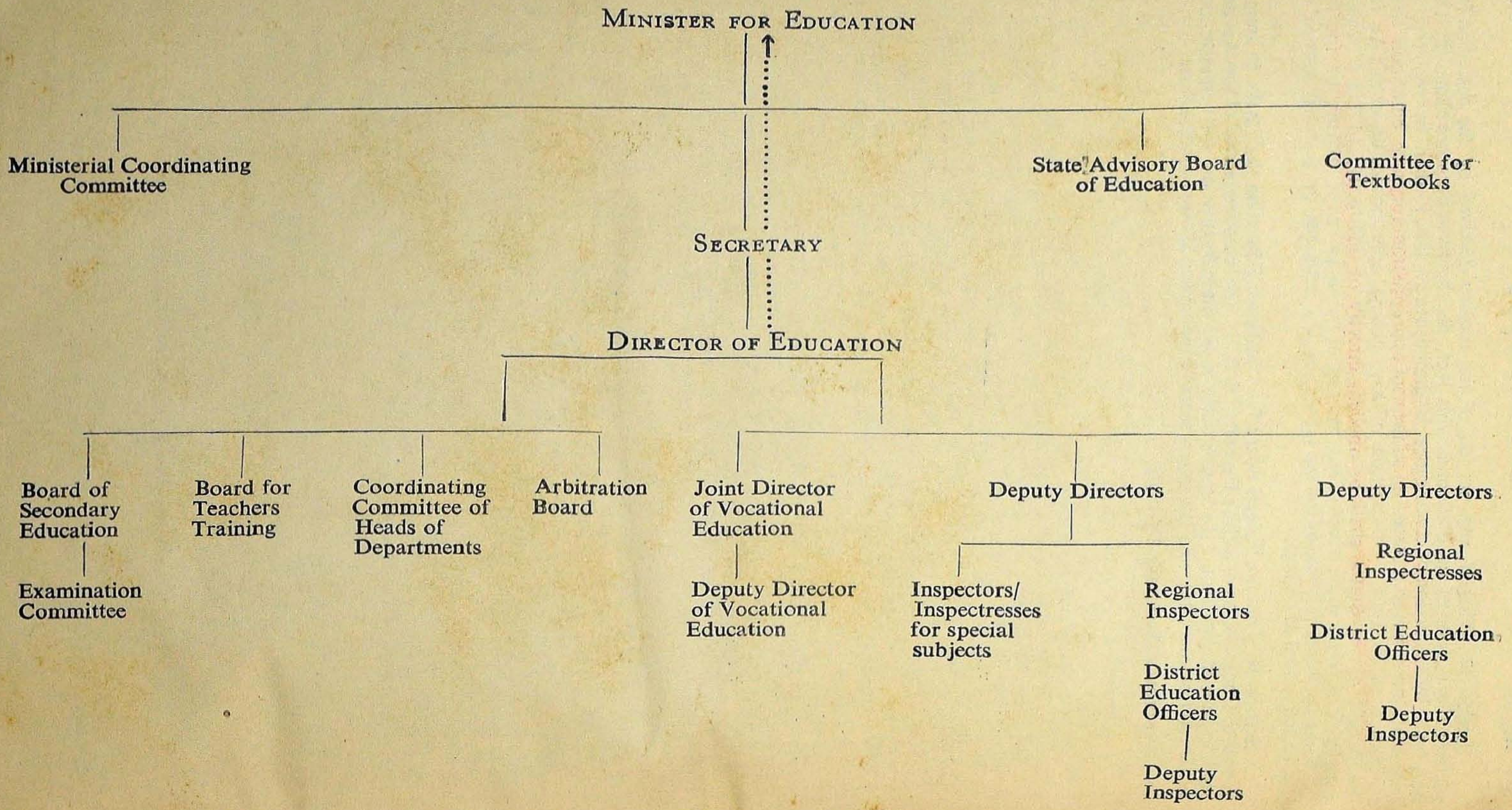
Section 17. That if any portion of the moneys received by the custodian for vocational education of any State under this Act, for any given purposes named in this Act, shall, by any action of contingency, be diminished or lost, it shall be replaced by such State, and until so replaced no subsequent appropriation for such education shall be paid to such State. No portion of any moneys appropriated under this Act for the benefit of the States shall be applied, directly or indirectly, to the purchase, erection, preservation, of repair of any building or buildings or equipment, or for the purchase or rental of lands, or for the support of any religious or privately owned or conducted school or college.

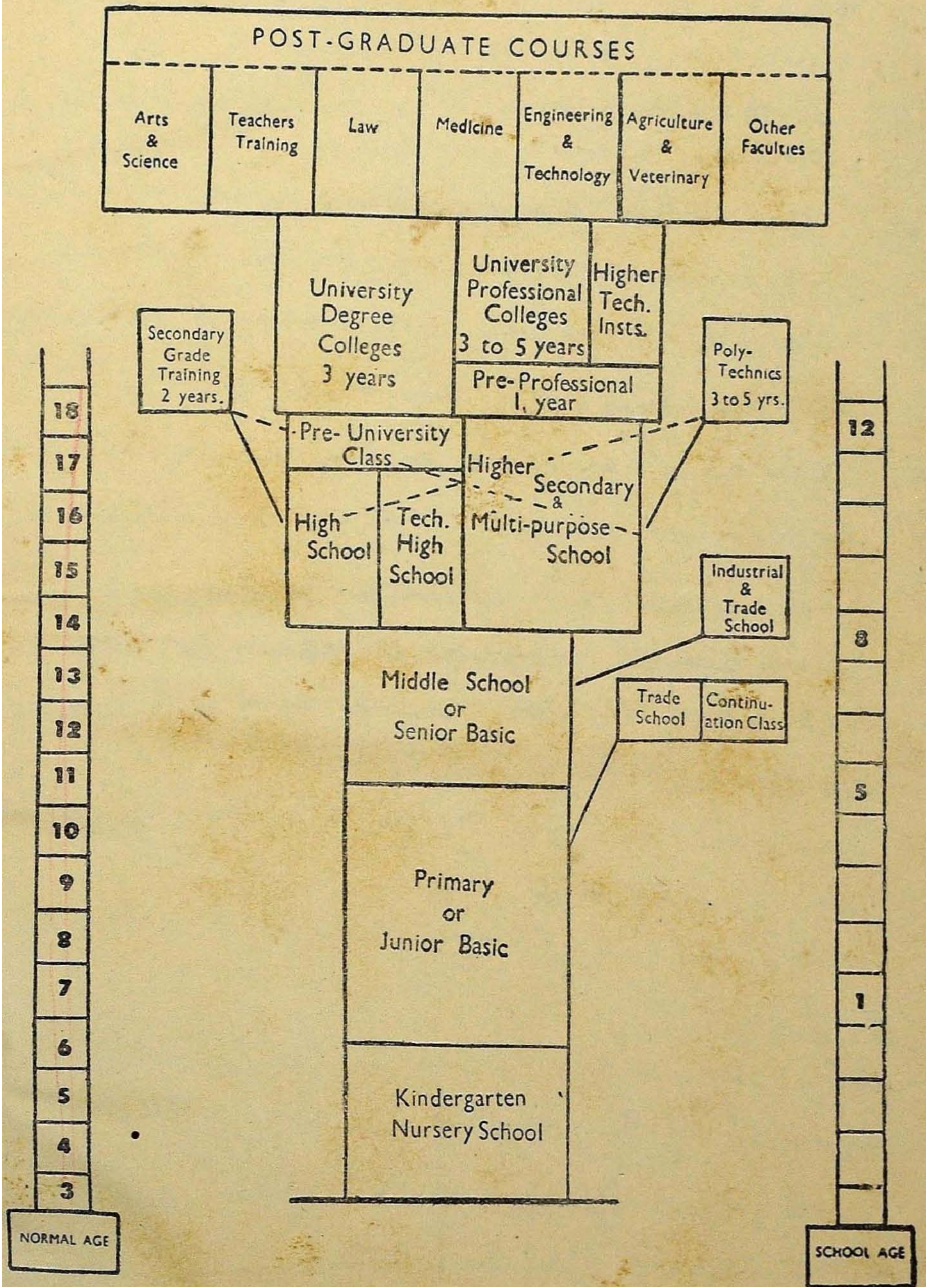
Section 18. That the Federal Board for Vocational Education shall make an annual report to Congress, on or before December first, on the administration of this Act and shall include in such report the reports made by the State Boards on the administration of this Act by each State and the expenditure of the money allowed to each State.

Approved, February 23, 1917.

ADMINISTRATIVE SET UP OF THE STATE DEPARTMENT OF EDUCATION

(Proposed Pattern)



EDUCATIONAL LADDER

PROPOSED ORGANISATIONAL PATTERN